OCTOBER 15, 1953

MODERN The Journal of Diagnosis and Treatment ALCINIC

MEDICINE



Dr. Paul D. White

With Nitranitol hypertensives can return to a more normal life...sooner



Restricted activity and frequent laboratory checkups are often a concern to the patient. You can return many hypertensives to a more normal life with Nitranitol. Because of its low toxicity, blood pressure is safely lowered -side effects are the exception rather than the expected. Nitranitol acts directly on the arterioles to produce gradual vasodilation. It maintains lowered pressures for prolonged periods.

Why not start your hypertensive patients on Nitranitol-the universally prescribed drug for essential hypertension?

MERRELL'S SAFE, GRADUAL, PROLONGED-ACTING VASODILATOR



arterioles, Nitranitol provides SAFE. LONGED vasodilation, in 5 dosage

Nitranitol

Mannitol hexanitrate 32 mg.

Vasodilation plus sedation: Nitranitol

with Phenobarbital

Mannitol bexanitrate 32 mg.

Phenobarbital 16 mg. Protection in capillary fragility:

Nitranitol

with Phenobarbital and Rutin*

with Rutin 20 mg.

When threat of cardiac failure exists: Nitranitol

with Phenobarbital and Theophylline*

with Theophylline . . 100 mg.

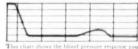
For refractory cases of hypertension: Nitranitol P. V.*

with Alkavervir . . . 1 mg. (A special alkaloidal fraction of Veratrum viride, biologically standardized for hypotensive activity.)

*Each contains Nitranitol 32 mg. and Phenobarbital 16 mg.

DOSAGE: In blood pressures over 200 systolic, 2 tablets 4 times daily. In other cases, 1 or 2 tablets every 4 to 6 hours.

NOTE: Netranitol is exceptionally stable, assuring potency, so important in hypertensive medication.





St. Thomas, Ontario

The Wm. S. Merrell Company . . . Pioneer in Medicine for 125 Years.



to prevent attacks in angina pectoris

Patient selection—Prophylactic management with Peritrate can be most effective in patients whose attacks come with relative frequency. Humphreys et al. found that while 78.4 per cent of all patients studied had fewer attacks, "... patients with the greatest number of attacks showed the greatest reduction..."

True angina vs. chest pain—Peritrate, which seems "specific" for angina pectoris, is virtually ineffective in angina-like chest pains of other etiology: only 5 out of 125 cases of nonanginal chest pain improved compared with 4 out of every 5 verified cases of angina pectoris¹⁻³ in which Peritrate produced

 fewer attacks of angina pectoris and/or reduction in the severity of those attacks which were not prevented.

Since Peritrate must be taken on a daily schedule, patients with occasional mild attacks are best treated with nitroglycerin.

For effective prophylactic management A long-lasting coronary vasodilator, Peritrate provides prophylactic action for 4 to 5 hours. Administration must be maintained on a continuing daily schedule—usually one tablet 3 or 4 times daily. Some patients require a 2-tablet dose. Peritrate is available in 10 mg. tablets in bottles of 100, 500 and 5000.

Bibliography: 1. Humphreys, P., et al.: Angiology 3:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. 52:2012 (Ang. 15) 1952. 3. Dailbeu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.



WARNER-CHILCOTT

Laboratories

NEW YORK



IEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT

Editorial Staff

Walter C. Alvarez, M.D., Editor-in-Chief

James B. Carey, M.D., Associate Editor Thomas Ziskin, M.D., Associate Editor Maurice B. Visscher, M.D., Associate Editor Reuben F. Erickson, M.D., Associate Editor Mark S. Parker, Executive Editor Sarah A. Davidson, Managing Editor James Niess, Editorial Board Secretary Inga Platou, Art Editor

Editorial Assistants: Elizabeth Kane, Lorraine Hannon, Mary Worthington, Swanhild N. Berg, Jean M. Bottcher

Science Writers: F. J. Bollum, M.D., Dale Cumming, M.D., Richard Disenhouse, M.D., Paul D. Erwin, M.D., William Evers, M.D., Donald V. Jordan, M.D., Dennis J. Kane, Ph.D., Michael Keeri-Szanto, M.D., Bernardine Lufkin, Wilmer L. Pew, M.D., L. D. MacLean, M.D., Anna P. North, Rosalind Novick, M.D., Raymond Scallen, M.D., William F. Sheeley, M.D., Norman Shrifter, M.D., W. Lane Williams, M.D.

Editorial Consultants

E. R. Anderson, M.D., SURGERY

Joe W. Baird, M.D., ANESTHESIOLOGY

A. B. Baker, M.D., NEUROLOGY

S. Steven Barron, M.D., PATHOLOGY

George Bergh, M.D., SURGERY

William C. Bernstein, M.D., PROCTOLOGY

Lawrence R. Boies, M.D., OTOLARYNGOLOGY

Edward P. Burch, M.D., OPHTHALMOLOGY

C. D. Creevy, M.D., UROLOGY

C. J. Ehrenberg, M.D., OBSTETRICS AND GYNECOLOGY

W. K. Haven, M.D., OPHTHALMOLOGY

Ben I. Heller, M.D., INTERNAL MEDICINE

Miland E. Knapp, M.D., PHYSICAL MEDICINE

Ralph T. Knight, M.D., ANESTHESIOLOGY

Frederic J. Kottke, M.D., PHYSICAL MEDICINE

Elizabeth C. Lowry, M.D., PEDIATRICS

John F. Pohl, M.D., ORTHOPEDICS

Wallace P. Ritchie, M.D., NEUROSURGERY

M. B. Sinykin, M.D., OBSTETRICS AND GYNECOLOGY

A. V. Stoesser, M.D., ALLERGY

Arthur L. H. Street, LL.B., FORENSIC MEDICINE

Marvin Sukov, M.D., PSYCHIATRY

Harry A. Wilmer, M.D., NEUROPSYCHIATRY

Modern Medicine, The Journal of Medical Progress, of Minneapolis, Minn., is published twice monthly on the first and fifteenth of each month, at 55 East 10th Street, St. Paul 2, Minn. Subscription rate: \$10.00 a year, 50c a copy.

ADDRESS ALL CORRESPONDENCE TO 84 SOUTH 10TH STREET, MINNEAPOLIS 3, MINN.

Acceptance under section 34.64, P. L. & R., authorized.

Copyright 1953 by Modern Medicine Publications, Inc. Title Reg. U. S. Pat. Off. Copyrighted in Mexico, authors' rights protected in Mexico-Reproduction thereof forbidden.



Lange and Weiner¹ suggest the term "hyperkinemics" to describe preparations such as Baume Bengué which produce blood flow through a tissue area. They point out that hyperkinemic effect, as measured by thermoneedles, may extend to a depth of 2.5 cm. below the surface of the skin.

In arthritis, myositis, muscle sprains, bursitis and arthralgia, Baume Bengué induces deep, active hyperemia and local analgesia. Systemically, Baume Bengué promotes salicylate action against underlying disease factors. It provides the high concentration of 19.7% methyl salicylate (as well as 14.4% menthol) in a specially prepared lanolin base to foster percutaneous absorption.

Lange, K., and Weiner, D.: J.
 Invest. Dermat. <u>12</u>:263 (May) 1949.

Baume Bengué

Available in both regular and mild strengths.

Thos. Leeming & Co. Inc. 155 East 44th Street, New York 17, N.Y.



THE JOURNAL OF DIAGNOSIS AND TREATMENT

National Editorial Board

George Baehr, M.D., New York City, INTERNAL MEDICINE
William L. Benedict, M.D., Rochester, Minn., OPHTHALMOLOGY
James T. Case, M.D., Chicago, RADIOLOGY
Franklin D. Dickson, M.D., Kansas City, ORTHOPEDICS
Arild E. Hansen, M.D., Galveston, PEDIATRICS
Julius H. Hess, M.D., Chicago, PEDIATRICS

Walter B. Hoover, M.D., Boston, Otolaryngology
John C. Krantz, Jr., Ph.D., Baltimore, Pharmacology
A. J. Lanza, M.D., New York City, Industrial medicine
Milton S. Lewis, M.D., Nashville, Obstetrics and Gynecology
George R. Livermore, M.D., Memphis, Urology
Francis W. Lynch, M.D., St. Paul, Dermatology

Cyril M. MacBryde, M.D., St. Louis, INTERNAL MEDICINE
Mabel G. Masten, M.D., Madison, Wis., NEUROPSYCHIATRY
Karl A. Meyer, M.D., Chicago, SURGERY
J. A. Myers, M.D., Minneapolis, INTERNAL MEDICINE
Alton Ochsner, M.D., New Orleans, SURGERY
Robert F. Patterson, M.D., Knoxville, ORTHOPEDICS

Edwin B. Plimpton, M.D., Los Angeles, ORTHOPEDICS
Fred W. Rankin, M.D., Lexington, Ky., Surgery
John Alton Reed, M.D., Washington, Internal Medicine
Rufus S. Reeves, M.D., Philadelphia, Internal Medicine
Leo Rigler, M.D., Minneapolis, Radiology
Dalton K. Rose, M.D., St. Louis, UROLOGY

Howard A. Rusk, M.D., New York City, PHYSICAL MEDICINE Roger S. Siddall, M.D., Detroit, OBSTETRICS

James S. Simmons, M.D., Boston, Public Health

W. Calhoun Stirling, M.D., Washington, UROLOGY

Frank P. Strickler, M.D., Louisville, SURGERY
Richard Torpin, M.D., Augusta, Ga., OBSTETRICS

Robert Turell, M.D., New York City, PROCTOLOGY
Dwight L. Wilbur, M.D., San Francisco, Internal Medicine
Paul M. Wood, M.D., New York City, Anesthesiology
Irving S. Wright, M.D., New York City, Internal Medicine



Have you tried **PENTIDS** for rheumatic fever prophylaxis?

"Penicillin is the drug of choice for treating streptococcic infections. . . . Oral penicillin has the desirable characteristics of being bactericidal for hemolytic streptococci and of rarely producing serious toxic reactions." Treatment: 200,000 to 300,000 units orally t.i.d. or q.i.d. Prophylaxis: 200,000 units orally b.i.d.

1. Statements of American Heart Assn. Council on Rheumatic Fever, J.A.M.A. 151:141, Jan. 10, 1953.

SQUIBB

PENTIDS

Squibb 200,000 Unit Penicillin G Potassium Tablets

Efficient spasmolysis...



.in functional disorders

... such as irritable colon, emotional diarrhea. peptic ulcer, pyrosis; also for inflammatory diarrhea due to acute gastroenteritis or ulcerative colitis, and functional dysmenorrhea.

Elixir BUTISOL[®] BELLADONNA

-has a more definite, efficient antispasmodic action because it combines in each 5 cc. (one teaspoonful):

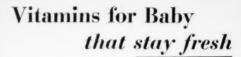
1 · BUTISOL® SODIUM 10 mg. (1/6 gr.)—"intermediate sedative" which is "particularly useful in the field of daytime sedation." The mild, relatively prolonged action of Butisol Sodium "makes it suitable for management of many functional disorders."1

2 · EXT. BELLADONNA 15 mg. (1/4 gr.)—in its preferred and most effective form—the natural extract rather than the synthetic alkaloids.

...in an exceptionally pleasant-tasting elixir colored an appetizing orangered. Supplied in bottles of one pint and one gallon. Samples on request.

> 1. Dripps, R.D.: Selective Utilization of Barbiturates. J.A.M.A. 139:148 (Jan. 15) 1949.

MCNEIL LABORATORIES, INC., PHILADELPHIA 32, PA.



No more need to worry about shelf deterioration of vitamins for little tots. The packaging of 'Vi-Mix Drops' seals in the freshness—protects heat and moisture-labile vitamins (especially B₁₂) by keeping them in stable, powder-dry form until ready for use. Until mixed, no refrigeration is required. Pharmacist or parent adds the separately packaged vehicle to the bottle containing the powder. The resultant solution is sparkling clear, fully potent.

Eli Lilly and Company Indianapolis 6, Indiana, U.S.A.

Lilly

Prescribe either the 30-cc. or 60-cc. package.

Vi-Mix Drops



TABLE OF CONTENTS

LETTER FROM THE EDITORS 16)
CORRESPONDENCE 18	3
QUESTIONS & ANSWERS 32	,
FORENSIC MEDICINE 48	3
WASHINGTON LETTER 60)
THE EDITOR'S PAGE	
Walter C. Alvarez 73	
MEDICINE	
Significance of Systolic Murmurs Paul D. White, Royal S. Schaaf, Timothy B. Counihan, and Buford Hall	
Hypoprothrombinemia in Congestive Heart Failure Chr. J. Bjerkelund and Esther Gleditsch	
Complications of Pneumoperitoneum 1. D. Bobrowitz	
Carcinoma of the Pancreas William A. Knight, Jr., and R. O. Muether	
Occult Blood in Feces Albert I. Mendeloff	
Armchair Therapy in Heart Disease Norman F. Wyatt, Julian R. Beckwith, and J. Edwin Wood, Jr. 81	
Test for Peripheral Arterial Disease B. Ejrup	
The Leptospiroses Harold Jeghers	
Vitamin D Poisoning	

for October 15 1953

Modern Medicine Vol. 21, No. 20

THE MAN ON THE COVER is Dr. Paul Dudley White of Boston. Clinical Professor of Medicine at Harvard University Medical School. Dr. White has served as chairman of American Medical Teaching Missions to Czechoslovakia, Greece, and Italy, Greece awarded him the Orders of Redeemer and Phoenix and Czechoslovakia bestowed the Order of the White Lion. In the years 1940-46, he was chairman of the committee on cardiovascular diseases of the National Research Council and in 1948 was executive director of the National Advisory Heart Council. A past president of the American Heart Association, Dr. White is a member of numerous medical societies in the United States and abroad. He is author of Heart Disease, Electrocardiography in Practice, and Heart Disease in General Practice. Among his recent contributions is the report on page 75, "Significance of Systolic Murmurs."



Contents	Treatment of Pinworms B. H. Kean
for	Metabolic Effects of Oral Licorice
October 15	W. I. Card, W. Mitchell, J. A. Strong, N. R. W. Taylor, S. L. Tompsett, and J. M. G. Wilson 8'
1953	
	UROLOGY
CONTINUED	Treatment for Stress Incontinence Lawrence R. Wharton 89
	SURGERY
	Subcutaneous Ligation of Varicose Veins Michael G. Wilson
33	Thrombolysis
	Nipple Discharge and Cancer Alson R. Kilgore, Ruth Fleming, and Manuel Mario Ramos 91
	Cancer of Lung among Physicians Ernest L. Wynder and Jerome Cornfield
	Benign Esophageal Lesions Harold Lincoln Thompson and George Gregory
	Hypercalcemia in Breast Cancer Therapy
	B. J. Kennedy, Dorothy M. Tibbetts, Ira T. Nathanson, and Joseph C. Aub94
	Sympathectomy for Frostbite Norman H. Isaacson and J. Blaine Harrell95
	Obliteration of Esophageal Varices George Crile, Jr96
	Multivalvular Heart Disease Houck E. Bolton, C. P. Bailey, William L. Jamison, and K. V. S. Rao

A NEW WEAPON for the treatment of BURSITIS and ARTHRITIS

COBADEN

NOW

The therapeutic usefulness of the muscle co-enzyme adenylic acid is enhanced by the action of vitamin B₁₂ (Cyanocobalamine).

Adenylic acid is unrelated to cortisone or the steroid hormones.

Clinical reports demonstrate maximum therapeutic action is obtained with a combination of Vitamin B₁₂ and pure muscle adenylic acid.

COBADEN is far more effective than either B₁₂ or adenylic acid when administered separately in the treatment of arthritis or bursitis (musculo-fasciaitis).

COBADEN
Supplied:
In 10 cc. multiple dose vials.

COBADEN - each cc. contains:

Adenosine-5-Phosphoric acid . . 25 mg. (ATP or adenylic acid)

Cyanocobalamine (B₁₁) 60 mcg.

We will gladly send you complete literature upon request.

Available through your Prescription Pharmacy or Surgical Supply Dealer ... or direct from:



PHARMACEUTICAL CO., INC.

333 COLUMBIA STREET, PENSSELAER NEW YORK

ts
r
5
3

CONTINUED



O	PHIHALMOLOGI
	Ophthalmic Solutions 98
PS	SYCHIATRY
	Psychotherapy in General Practice Julius Bauer 99
	Reactions with Thiocyanate Therapy Casimir A. Domzalski, Jr., Lawrence C. Kolb, and Edgar A. Hines, Jr100
GI	ERIATRICS
	Care of Elderly Surgical Patients E. Lee Strohl101
PE	DIATRICS
	Serum Cholesterol in Juvenile Diabetes
	Mark S. Dine and Robert L. Jackson102
	Myocardial Disease in Children Harold D. Rosenbaum, Alexander S. Nadas, and Edward B. D. Neuhauser
DH	ERMATOLOGY
	Pyogenic Infections104
NE	EUROSURGERY
	Spontaneous Subarachnoid Hemorrhage H. Lovell Hoffman105
	Trigeminal Neuralgia and Malocclusion Edmund A. Smolik and E. J. Hempstead
	Medullary Tractotomy for Pain Relief Albert S. Crawford and Robert S. Knighton
OB	STETRICS
	Bacterial Endocarditis in Pregnancy Paul Pedowitz and Louis M. Hellman

rheumatoid arthritis...

Cortisone (Upjohn)

Obal: Tablets Cortisone Acetate, scored 10 mg. per tablet, in bottles of 24, 25 mg. per tablet, in bottles of 20, 100, 500.

Intramuscular: Sterile Aqueous Suspension Cortisone Acetate

25 mg. per cc., in vials of 20 cc.

THE UPJOHN COMPANY, KALAMAZOO, MICHIGAN



G-Tussin

(Formerly Gusiatusem)

make

useful

every cough

GLYCERYL GUALACOLATE ... MOST EFFECTIVE COUGH MEDICATION.

(100 mg. per teaspoonful)

--increases respiratory tract fluid nearly 200%. Congestive secretions are liquefied and removed. The cough "loosens", becomes productive.

-reduces daily frequency of coughs by more than two-thirds.

PHENYLTOLOXAMINE

(10 mg. per teaspoonful)

-effective antihistaminic.

-diminishes cough reflex in the irritated pharynx through its mild, local anesthetic action.

G-Tussin

Non-Narcotic - Demulcent

White's

- 1. Case, L. J. and Frederick, W. S.:
- 2. Boyd, E. M. and Lapp, S.: J. Pharmac.
- 3. Stevens, M. B. et al.: Can. M. A. J.

Premenstrual Tension in Delinquents Contents J. H. Morton, H. Additon, R. G. Addison, L. Hunt, and for J. J. Sullivan110 October 15 PHYSICAL MEDICINE Rehabilitation for Amputees 1953 Donald A. Covalt Nonparalytic Cases of Poliomyelitis Eugene Moskowitz and Lawrence CONTINUED I. Kaplan......112 MODERN MEDICINE AWARD......113 SPECIAL EXHIBIT Transabdominal Gastroscopy and Coloscopy Stanley C. Hoerr and Rupert SPECIAL ARTICLE Physical Modalities in Dermatology June Carol Shafer and E. Randolph Trice.....120 MEDICAL FORUM Drugs for Suppression of Appetite...126 Natural Childbirth?.....142 Indications for Sterilization of Women Posttonsillectomy Hemorrhage.....160



SHORT REPORTS FROM ABROAD....174
BASIC SCIENCE BRIEFS.......182
SHORT REPORTS......192
CURRENT BOOKS & PAMPHLETS....236

Dear Reader:

If you have ever found yourself locked out of your car you know the convenience of having an extra key stashed away in some handy place.

Most of our readers reserve desk space or shelf room for *Modern Medicine*. Yet how often it happens that the particular wanted issue is missing. Back copies are not always available. The reader is locked out from the information he desires. He needs an extra key.

The extra key is available in the *Modern Medicine Annual*. All the material published during the preceding twelve months is permanently bound. The article you are looking for is there.

The material has been reclassified for convenience of everyday use. Two methods of approach have been used. All information on a particular problem, infant feeding for instance, has been arranged on consecutive pages. The Table of Contents provides the page numbers. Only one reference is needed to find the articles desired.

In the second place, a comprehensive index with copious cross references has been provided for the physician who is looking for information on a specific aspect of a problem. Diseases, symptoms, procedures, tests, and products are listed in the Subject Index and cross-indexed to provide ready access to every item of clinical interest. Each entry gives sufficient data to indicate the nature of the article and thus saves the reader's time. In addition, the Author Index gives the name of every author with the title of his contribution and the page number. Both indexes are in strict alphabetical order.

This extra key to the current medical literature will be reserved for you if you return the postcard accompanying this issue.

The Editors

"...for the first time in his life he developed a real appetite."

Here is a case history from a Philadelphia Pediatrician. It illustrates the clinical results achieved with 'Trophite' in below-par children:

Patient: Jim B., age 12, height 55 inches, weight 75 pounds. "... had been a very marked feeding problem since birth... was always called the 'runt'...a psychological problem."

Treatment: "He was started on 'Trophite' and for the first time in his life he developed a real appetite." One teaspoonful of 'Trophite' daily for 2 years.

Results: During first year he gained 13 pounds and grew 3 inches. "His appetite continued to improve . . ."

At the end of 2 years he weighed 108½ pounds and was 63½ inches tall—a total gain in weight of 33½ pounds and increase in height of 8½ inches.

Comment: "... no longer the 'runt' in his class...
a much happier and better adjusted child."

Smith, Kline & French Laboratories, Philadelphia



*T.M. Reg. U.S. Pat. Off.

B₁₂ plus B₁

to increase appetite and growth in below-par children

One teaspoonful (5 cc.) delivers 25 mcg. of Vitamin B₁₂ and 10 mg. of Vitamin B₁.

Correspondence

Communications from the readers of Modern Medicine are always welcome. Address communications to The Editors of Modern Medicine, 84 South 10th St., Minneapolis 3, Minn.

Infant Feeding

TO THE EDITORS: For the past five years, we have started 3-week-old infants on whole, homogenized milk, demand feeding, without untoward reactions. It is tolerated very well with no evidence of colic; stools are normal.

These infants are given orange juice at 2 weeks of age; strained cereal at 3 weeks; strained vegetables at 4 weeks; and strained meats and soups at 5 and 6 weeks.

CARL N. GRAF, M.D. CARL DAL LAGO, M.D.

Morton Grove, Ill.

Abaca Thread for Suturing

TO THE EDITORS: Since the end of World War II, we Filipino doctors have had to adopt an austerity program and have turned to the use of local materials. In thread made from fibers of the abaca plant, we have found a very useful suture material for minor surgery and skin closures.

The abaca thread compares favorably to catgut and, unlike cotton, does not fold up when wet with purulent material. After several days in the wound, it does not stick. Moreover, the glistening

white abaca can be easily seen and differentiated from debris.

Adopted because of economic necessity, abaca fiber has gained acceptance because of its advantages over cotton,

ERNESTO C. DEZA, M.D. Knoxville, Tenn.

Simplest Orchiopexy Technic

TO THE EDITORS: I was very much interested in your medical forum on Undescended Testis (Modern Medicine, Aug. 15, 1953, p. 126). Without entering into the argument pro and con regarding hormone therapy, I believe that the types of orchiopexy described in this forum should be, for the most part, relegated to the past.

For many years I have used a modification of Ombrédanne's or transseptal operation. The procedure has never failed to maintain the testicle in good position. It is true that of the testicles atrophied at the time of operation, only a few become normal testes. The Ombrédanne technic, which seems to have failed to gain popularity in this country, is one of the simplest technics generally done for orchiopexy.

O. A. NELSON, M.D.

Seattle

a major development in intravenous anesthesia

SURITAL SODIUM

(thiamylal sodium, Parke-Davis)

new ultrashort-acting intravenous anesthetic

SURITAL sodium - a distinctive advance in intravenous anesthesia - offers definite advantages to anesthesiologist, to surgeon, and to patient. Clinical experience in thousands of patients of from less than one year to more than ninety years of age has shown that SURITAL sodium ...



provides more rapid induction results in faster awakening

More detailed information on SURITAL sodium is available on request.



SURITAL sodium is supplied as follows:

0.5-Gm. ampoule; also in combination package with a 20-cc. ampoule of Water for Injection.





For the
many patients
resistant to
ordinary
weight gaining
measures



EDIOL

TRADEMARK

[ORAL FAT EMULSION SCHENLEY]

caloric boost without gastric burden

Just 2 tablespoonfuls q. i. d. (usual daily dose) of this exceptionally palatable, stabilized emulsion provide the caloric equivalent of:

- 12 pats of butter, or
- 1 dozen Parker House rolls, or
- 6 servings of macaroni and cheese, or
- 8 boiled eggs, or
- 6 baked potatoes, or
- 91/2 slices of bread

The unusually small particle size of EDIOL* (average, 1 micron) favors ease of digestion, rapid assimilation. Prepared from vegetable oil (50%) and sucrose (12½%), EDIOL can be taken by tasty spoonfuls; in milk or fruit juices; on fruits, puddings, or desserts.

At all pharmacies, in bottles of 16 fl. oz. For children, or where fat tolerance may be a problem, small initial doses may be prescribed and gradually increased to level of individual tolerance.

schenley

SCHENLEY LABORATORIES, INC.



*Trademark of Schenley Laboratories, Inc



a new organic complex of iron for iron deficiency anemias

iron choline citrate

NO GASTROINTESTINAL DISTRESS

...does not precipitate protein and is not astringent

BETTER ABSORPTION

...soluble throughout the entire pH range of the gastrointestinal tract

Three tablets or one fluid ounce of Ferrolip supplies 1.0 Gm. of Iron Choline Citrate equivalent to 120 mg. of elemental iron and 360 mg. of choline base.

FERROLIP Tablets:

1 or 2 three times daily. Supplied: Bottles of 100, 500 and 1000.

FERROLIP Liquid:

2 to 4 teaspoonfuls three times daily. Supplied: Pints and gallons.

FLINT, EATON & COMPANY

Western Branch: 112 Pomona Avenue, Brea California

Neck Surgery as a Specialty

TO THE EDITORS: The delicate arrangement and importance of the anatomic structures of the neck and the necessity for extreme care in operative management have always impressed me with the need for a surgical specialty dealing solely with that segment of the body.

Progress in surgical treatment has made cervical surgery more complex, but also more promising and safer. Acceptance as a surgical specialty is gradually taking place.

I have compared the chief technical difficulties of 10 operative procedures to bring about a stronger conception of the need of cervical surgery as a specialty. The procedures are mentioned in the order of ascending complexity.

Appendectomy—Operative difficulties are currently being attached to some disease of the organ itself or to an unusual location.

Inguinal hernia repair—The great number of technics devised implies the unsatisfactory results frequently obtained. Experience in dissection is required in some recurrent or neglected cases.

Cesarean section—This operation is included in general medical training but is safer in the hands of general surgeons and gynecologists when rapid action is needed.

Cholecystectomy—Sound training in general or gastroenterologic surgery is required to deal with some unexpected pathologic findings in this operation. Chief difficulty: identification and dissection of the cystic duct and gallbladder blood vessels.

Salpingo-oophorectomy and hysterectomy—Many times, experience and good judgment are called

(Continued on page 27)



combined attack on mixed infections with

ombiotic

PENICILLIN AND DIHYDROSTREPTOMYCIN

Synergistic combination of these two antibiotics, teamed for maximum therapeutic effectiveness. For combined attack upon the mixed bacterial flora often associated with infections of the urinary and respiratory tracts, for surgical prophylaxis, and in the treatment of other infections due to susceptible gram-positive and gram-negative organisms.

Supplied as

Combiotic P-5 single-dose and five-dose vials: 1.0 Gram Formula containing 300,000 units penicillin G procaine crystalline and 100,000 units buffered penicillin G potassium crystalline plus 1.0 Gm, dihydrostreptomycin sulfate in each dose, and 0.5 Gram Formula same as 1.0 Gram Formula but containing only 0.5 Gm. dihydrostreptomycin sulfate in each dose; also

Combiotic Aqueous Suspension in single-dose disposable Steraject® cartridges and five-dose vials, containing 400,000 units penicillin G procaine crystalline and 0.5 Gm. dihydrostreptomycin sulfate in each dose.



Pfizer Laboratories, Brooklyn 6, N. Y. Division, Chas. Pfizer & Co., Inc.



"This is what I call SERVICE!"

This Viso-Cardiette technician is reading her latest copy of the bi-monthly Sanborn Technical Bulletin, popular publication which is a continuous and free-of-charge part of our Service-to-Owners picture.

In each issue she finds helpful hints and reminders on Viso (and Metabulator) maintenance and operating procedure, trouble-shooting articles, ideas and techniques developed by other technicians, information on accessories, and the like — all prepared and edited by an experienced staff for the sole purpose of helping her do a better job.

The doctor, too, finds much of interest in the Bulletin — such as results of Bulletin surveys to determine the most commonly used leads and which data spaces are most wanted on mounting cards, notices of postgraduate courses and textbooks, nomenclature and derivation of present-day leads,

news of new equipment, and many clinically helpful articles.

And, the framed certificate proudly displayed in the scene above indicates that this technician has also seen her name in the Bulletin as a "graduate" of the Sanborn Service Course which she chose to take, by correspondence and at a nominal cost, for the information and understanding in operating technique it provides beyond the carefully-prepared Instruction Manual.

These EXCLUSIVE Service Helps are available ONLY to users of SANBORN electrocardiographs and metabolism testers. And both the Bulletin and the Service Course are only part of the many benefits received by Sanborn owners.

SANBORN

COMPANY

CAMBRIDGE 39,



A NEW NON-CONSTIPATING

HEMATINIC

duotinic[®]

multiple use hematinic with dove-tailed formula

contains all the known essential building blocks for regeneration of hemoglobin and red blood corpuscles

IRON AND WHOLE LIVER

provide a multiple source of hemopoietic factors, particularly valuable for patients refractory to simple oral iron therapy.

an important metabolic link in the maturation

of red blood cells.

VITAMIN C

facilitates conversion of Folic Acid to its physiologically active form,
Folinic Acid. Also aids in the utilization of iron.

WHOLE STOMACH SUBSTANCE

for its potentiating factor which promotes the absorption of ingested vitamin B₁₂.

HOG BILE EXTRACT

as a mild laxative without purgative action, and for its catalytic role in the absorption of iron.

FORMULA:
Each Duotinic Capsule
contains:

 Ferrous Sulfate (Exsicc.)
 200 mg.

 Vitamin B₁₂ U.S.P.
 10 mcg.

 Folic Acid
 0.375 mg.

 Ascorbic Acid
 50 mg.

 Extract Hog Bile (Desiccated)
 100 mg.

 Whole Stomach Substance
 100 mg.

 Desiccated Liver NF
 100 mg.

Supplied: Bottles of 100 capsules.

Doroge 1 capsule t.i.d. in from deficiency anemias; in other anemias as directed by the physician.

IVES-CAMERON COMPANY, INC., 22 East 40th Street, New York 16, N. Y.



"Have I been prescribing a calcium deficiency?"

MANY PHYSICIANS have asked themselves this question after reading recent reports which challenge the use of dicalcium phosphate as a source of calcium in the diet of pregnancy.

Page and Page (1) demonstrated that low-calcium tetany can actually be induced by dicalcium phosphate, and that these symptoms are eliminated by use of calcium lactate, which is phosphorus-free, plus aluminum hydroxide to remove dietary phosphorus. Serological studies by Newman (2) confirmed the fact that calcium levels are not elevated, even by large doses of

dicalcium phosphate and vitamin D.

THESE FINDINGS justify two clear-cut conclusions:

- The mere listing on a label of a calcium salt carries no assurance against calcium deficiency if phosphorus is also present.
- 2. There is a serious need for a complete prenatal supplement which provides assimilable calcium, plus vitamins and iron, and avoids the negative action of phosphorus.

Calcisalin'

(Harrower)

has been formulated in accordance with these conclusions. Physicians who have questioned past procedures are already prescribing it. Samples are available.

- (1) Page, E. W. and Page, E. P., Obs. and Gyn. 1:94-100, Jan. 1953.
- (2) Newman, R. L., Am. Jl. Obs. and Gyn. 65:796, Apr. 1953.

The

*A TRADE MARK

HARROWER

Laboratory, INC., 930 Newark Avenue, Jersey City 6, N. J.

upon to determine the extent of the operation. Gynecologists and excellent general surgeons alone ought to perform this procedure. Chief difficulty: excision of the organ in the vicinity of the ureters.

Gastrectomy—Special surgical instruments will facilitate this procedure, which is to be performed by general or gastroenterologic surgeons. Chief difficulty: dissection at the level of the duodenum.

Radical mastectomy—This type of surgery is restricted to general and oncologic surgeons in well-equipped operating rooms. Chief difficulty: dissection in the axilla.

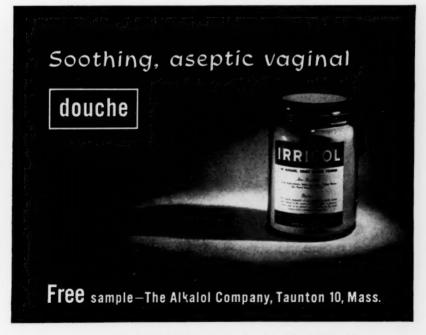
Thyroidectomy—A good knowledge of the regional anatomy and dexterity are demanded of the gen-

eral surgeon who performs the procedure. Chief difficulty: dissection near recurrent larvngeal nerves.

Pneumonectomy—This and related procedures are limited to thoracic surgeons in view of the particular type of pathology entertained and surgical problems aroused. Chief difficulty: dissection of the hilar structures.

Radical neck dissection—This operation is elaborate. Almost every stroke of the scalpel should be backed by sound anatomic knowledge and manual dexterity. At the present time this procedure is performed in the majority of the cases by general and oncologic surgeons.

UBALDO BERUMEN, JR., M.D. Huntington, W. Va.



HELPFUL FACTS ABOUT A NEW, USEFUL HYPOTENSIVE DRUG

'Provell Maleate,' an effective hypotensive agent, offers the following well-defined advantages:

Pure crystalline compound

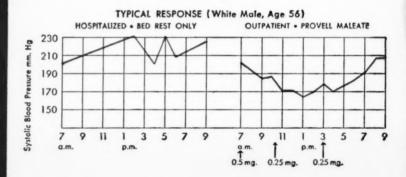
'Provell Maleate' is a pure crystalline compound obtained from *Veratrum album*. It possesses the therapeutic action of *Veratrum* in general, but permits strict and accurate control of dosage.

Consistent hypotensive effect

A carefully adjusted dosage schedule produces consistent hypotensive effect without nausea, vomiting, or tolerance to the medication,

Increases heart efficiency

'Provell Maleate' increases the efficiency of the heart, both directly and by decreasing the heart's work load. An investigator wrote: "Many patients that I see who have severe hypertension have some evidence of heart failure.... A major cause of death in hypertensives is heart failure. I like to administer a drug which effectively takes some of the load off the heart and increases the efficiency of the heart muscle."



Relatively safe

As the dosage increases, the patient experiences mild sensations of coolness around the mouth and tingling in the fingers. These precede the side-effects of nausea and vomiting and serve as helpful guides to proper dosage. Frequently, satisfactory lowering of blood pressure occurs before any side-effects appear. Vomiting acts as a "safety factor" to prevent overdosage.

Acts on central nervous system

'Provell Maleate' acts on the central nervous system. It is not a ganglion-blocking agent. Thus, it does not induce postural hypotension.

Dosage

The average total daily dose is 1 to 2.5 mg., which is usually divided into three to five doses administered at intervals of four to six hours. For maximum effect throughout the day, when activity and blood pressure are apt to be highest, Hoobler* recommends the following schedule:

Immediately after breakfast—0.5 to 1.5 mg. Two hours after breakfast—0.25 to 0.5 mg. Four hours after breakfast—0.25 to 0.5 mg. Signs of overdosage are tightness of throat, excessive salivation, nausea, vomiting, and bradycardia.

Supplied as 0.5-mg, cross-scored tablets in bottles of 100,

Be sure to evaluate critically this important new hypotensive agent.

Hoobier, S. W., et al.: Ann. Int. Med., 37:465, 1952.

Controls hypertension

consistently, safely

PROVELL MALEATE

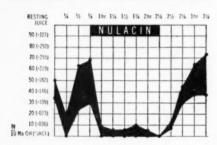
(Protoveratrine A and B Maleates, Lilly)



provides
continuous
maintained
gastric anacidity
required
for
rapid healing

RESTING JUICE 90 (-327) 80 (-282) 70 (-255) 60 (-219) 50 (-182) 40 (-186) 30 (-199) 30

GASTRIC ANALYSIS. Superimposed gruel fractional test-meal curves of five patients with peptic ulcer.



GASTRIC ANALYSIS. Same patients, two days later, showing the neutralizing effect of sucking Nulacin tablets (three an hour).

HORLICKS CORPORATION

in peptic ulcer

Nulacin

Nulacin quickly and conveniently achieves—in the ambulant patient—the intragastric state most conducive to continued freedom from pain and to rapid ulcer healing.^{1, 2}

It accomplishes this desirable objective—maintained anacidity—because the tablet is not chewed but is allowed to remain in the mouth and dissolve slowly.

Its contained antacids thus are released slowly, at a rate sufficient to neutralize virtually all HCl as it is formed.

Because of this maintained anacidity patients report a sense of well-being not experienced with other antacid medications.

Each tablet, prepared from milk combined with dextrins and maltose, incorporates magnesium trisilicate, 3.5 gr., magnesium oxide, 2.0 gr., calcium carbonate, 2.0 gr., magnesium carbonate, 0.5 gr., ol. menth. pip., q.s. The palatable taste of Nulacin meets with immediate patient acceptance.

In active ulcer flare-ups, two to three tablets per hour, starting one-half to one hour after each meal, are prescribed. During quiescent periods, the suggested dosage is two tablets between meals.

Indicated in active and quiescent peptic ulcer, gastritis, gastric hyperacidity. Available through all pharmacies in tubes of 25 tablets.

- Douthwaite, A. H., and Shaw, A. B.: The Control of Gastric Acidity, Brit. M. J. 2:180 (July 26) 1952.
- Douthwaite, A. H.: Medical Treatment of Peptic Ulcer, M. Press 227:195 (Feb. 27) 1952.

Pharmaceutical Division



NEOHYDRIN

NORMAL OUTPUT OF SODIUM AND

PRESCRIBE NEOHYDRIN whenever there is retention of sodium and water except in acute nephritis and intractable oliguric states. You can balance the output of salt and water against a more physiologic intake by individualizing dosage. From one to six tablets a day, as needed.

PRESCRIBE NEOHYDRIN in bottles of 50 tablets. There are 18.3 mg. of 3-chloromercuri-2-methoxy-propylurea in each tablet.



Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, Modern Medicine, 84 South Tenth Street, Minneapolis 3, Minnesota.

QUESTION: Some evidence has accumulated that an infant placed in a high concentration of oxygen may develop some eye changes. Would ozone be more likely to affect the eyes than a concentration of oxygen? Could an obscure eye condition developing in an adult be caused by a concentration of oxone?

M.D., Washington

ANSWER: By Consultant in Ophthalmology. No definite proof has been advanced that newborn infants placed in a high concentration of oxygen sometimes develop retrolental fibroplasia. Ozone is quite unlikely to affect the eyes adversely. I have never heard of any such situation and have never seen any patients who have had trouble as a result of high concentrations of oxygen or ozone.

QUESTION: A 28-year-old patient has had an undescended testis since birth. Should this testicle be removed? M.D., Louisiana

ANSWER: By Consultant in Urology. Opinion varies regarding treatment in such a case. An undescended testis is definitely more subject to malignant degeneration than if normally situated. This fact probably relates to some inherent defect in the testis rather than simply to position.

Current opinion holds that the undescended testis has about the same propensity for malignant degeneration as the normal female breast.

I believe that the virtue of orchiopexy is that the testicle is then placed in a position for observation and removal should evidence of neoplasia occur. If hypoplasia is found at operation, removal is undoubtedly preferred to orchiectomy.

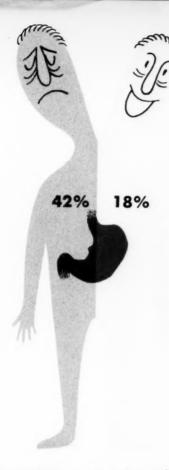
QUESTION: May Driset be used in place of World War II dried plasma if the patient is one and one-half hours from a hospital and in severe shock?

M.D., Virginia

ANSWER: By Consultant in Internal Medicine. Recent developments in the synthesis of polymers of large molecular size have now provided substances which may be used as plasma expanders or extenders.

Some of these substances which have been tried or suggested are acacia, gelatin, oxypolygelatin, isinglass, dextran, polyvinylpyrrolidone, pectin, and even globin.

The U.S. Army now uses dextran exclusively in place of plasma for transfusions. Some of the ad-



TRIMUCOLAN, a new mucin-antacid, excels standard therapy because...

Ulcer recurrence reduced...

standard therapy 42% mucin-antacid 18%

A rate of 42 per cent for standard therapy comes to light in 64 reports¹ covering 13,537 ulcer patients during a fifty year period.

The superiority of mucin-antacid therapy is shown by the comparatively *low recurrence* rate of 18 per cent. This is the figure on 125 patients treated by Hardt and Steigmann.²

- It relieves pain almost as quickly as soluble alkalis, but without rebound or alkalosis.
- It coats and clings to ulcer and entire gastric mucosa uniformly.
- 3. It remains in stomach longer exerts prolonged antacid action.
- It retards pepsin activity and inhibits mucosal erosion.
- 5. It reduces the likelihood of ulcer recurrence at least 50 per cent.

TRIMUCOLAN

IS MUCIN + REACTIVE ALUMINUM HYDROXIDE + MAGNESIUM TRISILICATE



 Bralow, S. P., Spellberg, M., Kroll, H., and Necheles, H., Am. Jour. Digest. Dis., 17.119, Apr., 1950.

2. Hardt, L. L., and Steigmann, Frederick Am. Jour. Digest Dis., 17 195, June, 1950

See helpful offer on reverse side.

Trimucolan, trademark reg. U.S. Pat. Off.

Now-relieve the "pain" of monotony in ulcer



You fill in patient's name

... and sign

Give "THE CHEERFUL ULCER DIET"

26 recipes to excite the patient's interest without exciting his ulcer.

Restore to ulcer patients the pleasure of eating with these recipes. Relieve ulcer pain and symptoms with

TRIMUCOLAN

a new mucin-antacid

Send for "THE CHEERFUL ULCER DIET".

Let patients enjoy these tempting, digestible dishes *soon*. The booklet carries the authority of your signature on the cover. Mail the coupon now!

	eerful Ulcer Diet"—a practical 16 page is. Specially prepared under expert super-
vision to enliven the maintenance u	
NAME	
STREET	
CITY	ZONESTATE
	779 M

vantages in the use of dextran are: [1] availability and limitless supply; [2] relative inexpense when compared with the cost of commercial plasma; and [3] absence of the virus of serum hepatitis, reported in some commercial plasma.

I advise stocking dextran to be employed in emergencies such as that mentioned.

QUESTION: What can be done for a 10-year-old girl who has severe atrophic rhinitis? She has a foul odor, loss of mucosa, and loss of turbinal bone with saddle nose and is nearly a social outcast.

M.D., Louisiana

ANSWER: By Consultant in Otolaryngology. Severe atrophic rhinitis with loss of turbinal bones and extensive atrophy of tissues is incurable. Meticulous local treatment, such as is described in the chapter dealing with this condition in the textbook Fundamentals of Otolaryngology by Lawrence R. Boies and associates, published in 1949 by W. B. Saunders Company, Philadelphia, will control the odor and crusting of this condition to some extent.

Recently attempts have been made to decrease the roomy space in the nose by acrylic inserts into the nasal septum. In an advanced case, this procedure is worth a trial, the theory being that the space is narrowed and less drying takes place.

Dilaudid hydrochloride

(dihydromorphinone hydrochloride)

COUNCIL ACCEPTED

Powerful opiate analgesic -

dose, 1/32 grain to 1/20 grain.

Potent cough sedative -

dose, 1/128 grain to 1/64 grain.

Readily soluble, quick acting.

Side effects, such as nausea and constipation, seem less likely to occur. Dependable for relief of pain and cough, not administered for hypnosis. An opiate, has addictive properties.

* Dilaudid is subject to Federal narcotic regulations. • Dilaudid, Trade Mark Bilhuber.

Bilhuber-Knoll Corp. Orange, N. J.



References: 1. Goldstein, L. S.: Clin. Med. 59:455, 1952.

NOW prevent reactions to penicillin and other

CHLOR-TRIMETON Injection 100 mg./cc.

Inject intramuscularly 10 to 20 mg. (0.1 to 0.2 cc.) in the same syringe with an aqueous medication.

parenterals

Consult your Schering representative or write for full information.

Packaging: CHLOR-TRIMETON Injection 100 mg./cc., 2 cc. multiple-dose vials, CHLOR-TRIMETON® Maleate. chlorprophenpyridamine maleate.

Schering

small dosage only 3 capsules daily

Natalins

the new smaller prenatal capsules

A nation-wide survey of practicing physicians revealed large size and large dosage to be the greatest deterrents to patient's regular use of prenatal capsules.

Natalins are designed to overcome the disadvantages of the usual large size, large dosage prenatal capsules, yet provide generous vitamin and mineral supplementation. Natalins' small, easy-to-swallow size and small dosage of only 3 capsules daily assure instant, as well as continued, patient acceptance throughout the stress period of pregnancy.



Natalins

MEAD JOHNSON & COMPANY Evansville 21, Ind., U.S.A.

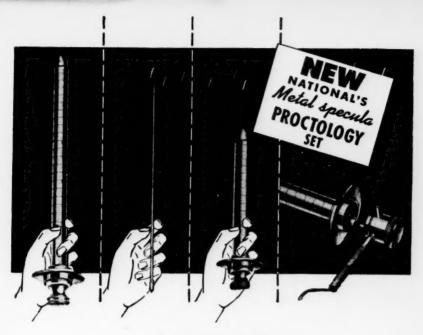


Vitamin and Mineral Potencies

Nutrient		3 capsules supply	
Vitamin A	6000	units	
Vitamin D	600	enits	
Ascorbic acid	100	mg.	
Thiamine	3	mg.	
Riboflavin	4.5	mg.	
Niacinamide	30	mg.	
Pyridoxine hydrochloride	0.6	mg.	
Calcium pantothenate	3	mg.	
Folic acid	1	mg.	
Vitamin B ₁₂ (crystalline)	1	mcg.	
Iron (from ferrous sulfate)	22	mg.	
Calcium	375	mg.	
Phosphorus	188	mg.	

Natalins also contain traces of copper, zinc, manganese, magnesium and fluorine.

Supplied in bottles of 100 and 500.



...in some things

QUALITY is obvious

In National's DUAL-LIGHT Proctology Set QUALITY is proved by performance.

Features that are important to you...

Actually two sets in one because adjustable proximal beam and distal illumination are available.

Deeply etched complete circle calibrations.

Numerals on both sides, easily read.

Easy, quick, sure assembly.

Free of fussy attachments.

Change over from distal to proximal illumination in seconds, and it handles nicely.

Moderately priced.

Set contains: proctoscopesigmoidoscope, anoscope, illuminator head, insufflator bulb and lens lamps for proximal illumination. Distal illumination optional at slight extra cost. Suggestion:
Ask your dealer to show you this set.



ELMHURST 73, N.Y.



"You say you can hear all right, but that it doesn't do you any good. Nothing I can do about that."

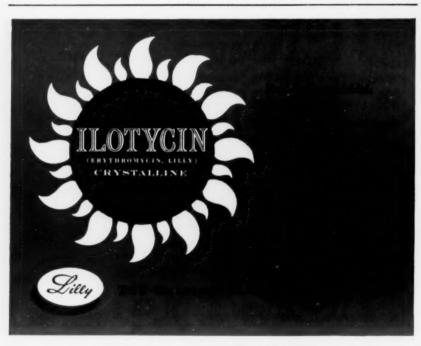
Life's Weary Moments

Think of a gag that fits the illustration. For every issue a new gag is published and the author sent \$5. The Oct. 15 winner is

L. B. Windham, M.D. Tyler, Texas

Mail your caption to The Cartoon Editor Caption Contest No. 1

MODERN MEDICINE 84 South 10th St. Minneapolis 3, Minn.



38 MODERN MEDICINE, October 15, 1953

R,
for
direct
relief of
pain

Much Better for ...

HEADACHE

DYSMENORRHEA

RHEUMATIC PAIN

COLDS AND GRIPPE

LOW BACK PAIN

Strascogesic

NON-NARCOTIC NON-BARBITURATE NON-ACID

EACH TABLET CONTAINS

analgesic

anti-depressant

Raphetamine (racemic amphetamine phosphate, monobasic) 2 mg.

relaxing

Metropine® (methyl atropine nitrate) 0.5 mg.

Supplied in bettles of 100 and 1000

Average Adult Dese: 1 to 2 tablets every 3 to 4 hours,

Strasenburgh

& J. STRASENBURGH CO., ROCHESTER, H.Y., U.S.A.

THERAPEUTICALLY SAFE

RAPID, PROLONGED ANALGESIA

WELL TOLERATED

NON-HABIT FORMING

BY PRESCRIPTION ONLY

Available on Prescription at All Leading Pharmacies



Do you sometimes feel that a patient would benefit from drinking less coffee, because he is "caffein sensitive"? Why not tell him he can drink all the coffee he wants, as long as it is Sanka Coffee —97% caffein-free?

New, Extra-Rich Sanka is a wonderful coffee, Doctor. You'll enjoy it yourself.



Products of General Foods

SANKA COFFEE

DELICIOUS IN EITHER INSTANT OR REGULAR FORM

Nothing missing...

when you prescribe

NEOGEN

for the treatment of

Asthma and associated disorders



contain the efficient broncho-dilating agents plus pentobarbital and benzocaine for its local anesthetic effect.

NEOGEN SUPPOSITORIES.

containing a nonirritating base, will give prompt . . . sustained . . . efficient therapeutic results.

Supplied: FULL Strength for ADULTS, Boxes 12's ONE-HALF Strength for CHILDREN, Boxes 12's

R	FULL	HALF
14	STRENGTH	STRENGTH
Aminophilline	4 gr.	2 gr.
Theophylline	3 gr.	1 1/2 gr.
Pentobarbital	1 gr.	1/2 gr.
Ephedrine suifate	3/8 gr.	3/16 gr.
Benzocaine	3 gr.	1 1/2 gr.

Samples and literature? OF COURSE! Write to:



Pharmaceutical Laboratories, Inc. South Hackensack, N. J.

The NEW AO STERILE FLUIDS

PUMP



For Whole Blood, Plasma and Sterile Fluids

Here is the answer to a long felt need for a simple portable pump to increase the rate of flow to the patient.

The AO Sterile Fluids Pump may be held by hand or clamped to the pillar of an irrigation stand, with the aid of a disposable adapter set the pump can be connected to intravenous infusion sets.

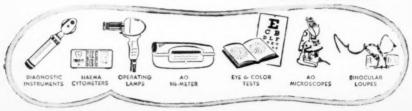
The pump does not require sterilization since no part of the pump contacts the fluid. When desired, the pump may be instantly returned to gravity feed.

The AO Sterile Fluids Pump may be clamped to the vertical pillar (3/8" or 3/4" diameter) of an irrigation stand.

Ask your AO Distributor or Representative to show you the new Sterile Fluids Pump or write to Dept. X109.

American Optical







dietary dub

EVENTUALLY, you may be riding herd on his irregular eating habits and probably, prescribing a potent, B complex supplement like Sur-bex or Sur-bex with Vitamin C.

> Compressed, easy to swallow, each Sur-Bex tablet provides six important B vitamins, plus liver fraction and brewer's yeast. Sur-bex WITH C adds five times the minimum daily requirement of ascorbic acid. No trace of liver odor in these triple-coated, vanilla-flavored tablets.

> > Daily prophylactic dose is one tablet. Two or more for severe deficiencies.

Each SUR-BEX Tablet contains:

Thiamine Mononitrate. 6 mg. Thiamine Monontrate . 6 mg.
Riboflavin 6 mg.
Nicotinamide 30 mg.
Pyridoxine Hydrochloride 1 mg.
Vitamin B₁₂ (as vitamin

PRESCRIBE

UR-BEX

In bottles of 100, 500 and 1000. Abbott

(Abbott's Vitamin B Complex Tablets)

or SUR-BEX with C

1-175



The Distracting Agony of Hemorrhoids

The torment of hemorrhoids disrupts normal mental processes. Reason, reflection, decision are difficult.

Physicians have for many years prescribed safe, sure Anusol Suppositories, which have given quick relief and peace of mind to thousands of men and women. For use with the Suppositories, we have now added Unguent made of the same ingredients.

The Anusol Suppository quickly forms a soothing, protective film over the irritated rectal mucosa, providing almost immediate relief. The new Unguent, externally applied to inflamed areas, gives prompt, cooling comfort.

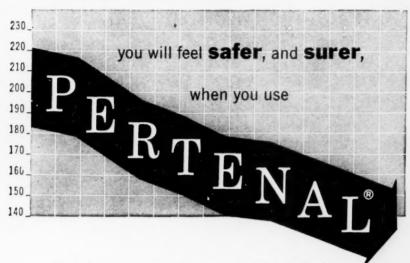
Suppositories: boxes of 6, 12 or 24; Unguent in 1 ounce tube. Warner-Chilcott Laboratories, Division of Warner-Hudnut, Inc., New York 11, N. Y.

Prescribe Anusol

SUPPOSITORIES ® UNGUENT

Prompt, Prolonged Relief Without Narcotics or Anesthetics

in hypertension



<u>Safer</u> because Pertenal assures well-sustained lowering of pressure, and prompt control of distressing symptoms, without fear of serious toxic reaction.

<u>Surer</u> because Pertenal is a comprehensive approach to the problem.



- The DUAL HYPOTENSIVE ACTION of veratrum viride and mannitol hexanitrate. Mannitol hexanitrate reduces pressure promptly, permitting the veratrum to take effect at a lower pressure level and with lower dosage ... thus reducing possibility of toxic reaction.
- 2. The G.I. ANTISPASMODIC ACTION of homatropine methylbromide to relax g.i. tension and to prevent or decrease any veratrum nausea.
- The SEDATIVE ACTION of phenobarbital to allay anxiety and decrease mental tension.

For better and safer control of the many symptoms and the many factors which may aggravate or intensify HYPERTENSION specify PERTENAL.

detailed information and samples to physicians on request

CROOKES LABORATORIES INC. (Crookes) MINEOLA NEW YORK

Therapeutic Preparations for the Medical Profession

It belongs with your trusted Johnson Surgical dressings



You'll find the famous Johnson & Johnson quality in Johnson's Elastic Bandage—Rubber-Reinforced.

Use and prescribe it. You'll like its light weight and extra elasticity. Women like its *natural* flesh color.

And remember—Johnson & Johnson quality costs you and your patients no more.

Johnson's ELASTIC BANDAGE

(Rubber-Reinforced)



THE DUAL ROLE OF CARBONATED BEVERAGES IN NUTRITION

It is well known that carbohydrate is more than just a source of energy.¹ It plays an important role in the "operative" as distinguished from the "energy" metabolism—is a part of the machinery of metabolism as opposed to its fuel. Sugar spares protein²⁹, prevents acidosis and ketosis; detoxifies and increases tissue resistance to infection.³

Blood glucose concentration is directly dependent upon dietary sugar for efficient maintenance which in turn maintains consciousness.

Sugars, together with another physiologically valuable substance, CO₂ are the basis for all sweetened carbonated beverages, truly valuable as an adjuvant in nutrition. They are pleasant, effective, economical dietary supplements.

Used routinely in hospitals for a variety of purposes, on the average a bottle of carbonated beverage contains 100 calories in a form rapidly utilizable by the body as both metabolic energy and "machinery."

 Nutrition Reviews, 10:172, 1952
 Allison, J. B., Fed. Proc. 10:676, 1951
 Soskin, S. and Levine, R., Carbohydrate Metabolism U. of Chicago Press, 1946



THE MATIONAL ASSOCIATION OF THE SOTTLED SOFT DRINE INDUSTRY

American Bottlers of Carbonated Beverages

WASHINGTON &, B. C.

Forensic Medicine

ARTHUR L. H. STREET, LL.B.

Prepared especially for Modern Medicine

PROBLEM: In Ohio, as in many other states, part payment of a bill may delay the time within which the creditor may sue before the bill becomes outlawed. A husband owed a doctor bill for services rendered to his wife. Without his knowledge she made payment on it. Did that delay commencement of the six-year period during which suit could be brought against the husband to collect the balance?

COURT'S ANSWER: No.

It was so determined by one of the Ohio Courts of Common Pleas (1 Ohio Supp. 269).

PROBLEM: In a damage suit for malpractice, the patient alleged that, "wholly disregarding their duties," the doctors performing a tonsillectomy "so unskillfully and negligently conducted themselves" that "through their want of skill and care, in some way, or by some means without the knowledge of plaintiff, and beyond her power to explain," caused an injury to the left eye. Did the trial judge properly admit testimony showing that the doctors bore a good reputation for skill and care?

COURT'S ANSWER: Yes.

This decision, by the West Virginia Supreme Court of Appeals in

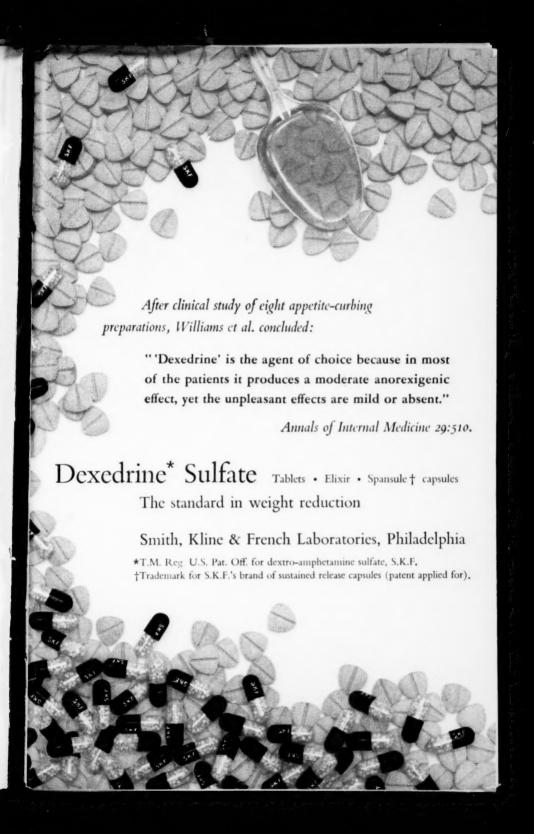
dismissing the suit, was based upon the fact that no specific negligence was charged against the doctors (164 S.E. 670).

The court approved the reasoning of the New Hampshire Supreme Court in another case, drawing distinction between a surgeon charged with ignorance as to the proper surgical treatment for a given injury and one who, "being properly educated, and competently learned in his profession," has acted negligently and "contrary to what must have been his better knowledge and judgment, if he had given proper attention" (27 N.H. 460).

PROBLEM: Under California law, a criminal conspiracy is not established by proof of an agreement made in the state unless it is proved that some overt act toward execution of the conspiracy was committed within the state. Doctors within the state agreed to perform criminal abortions. The women were transported to San Diego, where the operations had been contemplated. However, they were then taken to Mexico, where the operations were performed. Did the doctors violate the California law?

COURT'S ANSWER: Yes.

The California Supreme Court set aside a conviction and ordered a new trial on the belief that the trial judge did not properly instruct the jury as to the need for corroboration of an accomplice's testimony, and further erred in receiving evidence concerning Mexican law dealing with abortions (256 Pac. 2d 317).



How to produce effective bacteriostasis in sore throat and post-nasal drip

Instilled Intranasally, 'Paredrine'-Sulfathiazole Suspension covers the nasopharynx and pharynx; coats infected mucosa with a soothing, bacteriostatic blanket. It is not quickly washed away, but clings to the throat for hours—insuring prolonged bacteriostasis. The Suspension is particularly effective in sore throat when instilled on retiring. Frequently, it produces bacteriostasis (and analgesia) all night long.



Pharynx is inflamed before administration of 'Paredrine'-Sulfathiazole Suspension



Pharynx after intranasal instillation of 'Paredrine'-Sulfathiazole Suspension

Paredrine*-Sulfathiazole Suspension

Vasoconstriction in minutes . . . bacteriostasis for hours.

Smith, Kline & French Laboratories, Philadelphia

*T.M. Reg. U.S. Pat. Off. for hydroxyamphetamine hydrobromide, S.K.F.

PROBLEM: From youth, petitioner desired to become a doctor. He pursued premedical studies but, unable to secure admission to an American medical school, enrolled in a medical school in Rome. He had registered under the Selective Service Act and returned home under threat of indictment for violating the act. A draft board denied his application to be classified as a medical student and ordered him to report for induction. Was he entitled to a writ of habeas corpus to secure a judicial determination of his rights?

COURT'S ANSWER: Yes.

The U.S. District Judge of the Eastern District of Pennsylvania declared that, if substantiated by proof, the facts averred by petitioner would show that the draft board acted arbitrarily and capriciously (105 Fed. Supp. 139).

PROBLEM: A mother sought a juvenile court order committing her daughter to a psychiatric school. Testimony based upon a report made by the daughter's physician was read in evidence over her attorney's objection that the report involved confidential professional information. No opportunity was afforded to cross-examine the physician. Did these facts invalidate the order of commitment?

COURT'S ANSWER: Yes.

The Municipal Court of Appeals, District of Columbia, reasoned that the mother, being an adverse party in the proceeding, could not waive the privileged character of the information secured by the doctor in examining or treating the daughter. Furthermore, no opportunity was given to inquire into the doctor's qualifications to express a dependable opinion as to the need for a commitment and to inquire of him if there was a sound medical solution of the problems between mother and daughter (97 Atl. 2d 457).

Willraviolet STILL THE CHOICE IN MANY CONDITIONS

a valuable aid in the treatment of various types of skin diseases specifically on lupus vulgaris. And frequently has a beneficial effect in such conditions as acre vulgaris, eczema, psoriasis, psoriasis rosea and indolent ulcers.

> These are only a few of the conditions where ultraviolet is indicated.



The Hanovia Luxor Alpine Lamp is useful in the office of every doctor whose practice includes obstetrics, pediatrics, internal medicine, dermatology or arthopedics.

Four new authoritative treatises on ultraviolet free on request. Write Dept. M M-10

HANOVIA

CHEMICAL & MFG. CO. Newark 5, New Jersey

World's largest manufacturers of ultraviolet equipment.

"It is believed that a phosphorated carbohydrate solution has a definite place among the various medications commonly employed in the control of nausea and vomiting of early pregnancy . . . it is free of annoying side effects...safe and physiologic ... neither stimulates nor depresses relatively inexpensive. Further, its value for a given patient can be readily appraised by the physician in a minimum of time."

"morning sickness"

EMETROL

[PHOSPHORATED CARBOHYDRATE SOLUTION]

In a well-controlled study, Crunden and Davis¹ recently found that EMETROL abolished or reduced the severity of pregnancy nausea in 78.8 percent of 123 patients...usually within 24 hours. In contrast, a placebo of similar taste and appearance proved moderately beneficial in only 15.6 percent of 122 controls.

EMETROL works *physiologically*, providing rapid relief in nonorganic nausea and vomiting without recourse to antihistaminics, barbiturates, or narcotics; it thus may be administered freely without fear of distressing side-effects.

EMETROL contains balanced amounts of levulose and dextrose in coacting association with orthophosphoric acid, stabilized at an optimally adjusted pH. The dosage of EMETROL for nausea of pregnancy is 2 tablespoonfuls taken *undiluted* immediately on arising, repeated as required if nausea recurs.

Also beneficial in other types of vomiting: EMETROL has also been used successfully in acute infectious gastroenteritis (intestinal "flu"), motion sickness, and nausea due to drug therapy or anesthesia. Samples and literature giving dosages for the various indications of EMETROL are available on request.

IMPORTANT: EMETROL must *not* be diluted or followed by any liquids for at least 15 minutes.

SUPPLIED: Bottles of 3 fl. oz. and 16 fl. oz. through all pharmacies.

1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311, 1953.

KINNEY & COMPANY, INC. . COLUMBUS, INDIANA

(Kinney)

physiologic

"It is believed that a phosphorated carbohydrate solution has a definite place among the various medications commonly employed in the control of nausea and ployed in the control of nausea and pregnancy it is free of annoying side effects and physical side of the control of nausea and physical side of the control of the contro

"morning sickness"

EMETROL

[PHOSPHORATED CARBOHYDRATE SOLUTION]

In a well-controlled study, Crunden and Davis¹ recently found that EMETROL abolished or reduced the severity of pregnancy nausea in 78.8 percent of 123 patients...usually within 24 hours. In contrast, a placebo of similar taste and appearance proved moderately beneficial in only 15.6 percent of 122 controls.

EMETROL works *physiologically*, providing rapid relief in nonorganic nausea and vomiting without recourse to antihistaminics, barbiturates, or narcotics; it thus may be administered freely without fear of distressing side-effects.

EMETROL contains balanced amounts of levulose and dextrose in coacting association with orthophosphoric acid, stabilized at an optimally adjusted pH. The dosage of EMETROL for nausea of pregnancy is 2 tablespoonfuls taken *undiluted* immediately on arising, repeated as required if nausea recurs.

Also beneficial in other types of vomiting: EMETROL has also been used successfully in acute infectious gastroenteritis (intestinal "flu"), motion sickness, and nausea due to drug therapy or anesthesia. Samples and literature giving dosages for the various indications of EMETROL are available on request.

IMPORTANT: EMETROL must *not* be diluted or followed by any liquids for at least 15 minutes.

SUPPLIED: Bottles of 3 fl. oz. and 16 fl. oz. through all pharmacies.

1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec.
65:311, 1953.

KINNEY & COMPANY, INC. . COLUMBUS, INDIANA

Kinney)



PANETONE PANETONE REPETAB

the woman past 41
not estrogen alone

AT GYNETONE REPETABS

estrogen-androgen
for superior symptomatic
and systemic benefits

two strengths

0.02 mg. ethinyl estradiol plus 5 mg. methyltestosterone 0.04 mg. ethinyl estradiol plus 10 mg. methyltestosterone GYNETONE, combined estrogen-androgen, Schering REPETARS, Repeat Action Tablets, Schering



Do you protect your patients with antitoxins and antibiotics and then expose them to the danger of virus infection?

Today, with daily administering of injections, safe office practice calls for the complete sterilizing technique of the hospital operating room.

For there is no telling which patient's blood stream carries dangerous sporulating bacteria or viruses that may be transmitted on inadequately sterilized instruments.

Therefore, every instrument touching the blood stream of any patient should be subjected to moist heat of 250° F. Any means of sterilization less effective exposes your patients to serious infection.



FL-2 Autoclave chamber is 6" x 12"; HP-2, 8" x 16". Both are self-contained, efficient and easy to operate.

PROTECT YOURSELF, YOUR PATIENTS, WITH A PELTON AUTOCLAVE

To the private office, a Pelton FL-2 or HP-2 Autoclave brings the *safety* plus the *speed* of hospital sterilization. It provides certain destruction of bacteria and safely handles fabrics, gloves, and solutions, as well as instruments. Call your dealer or write for our booklet, "A-B-C of Autoclave Sterilizing".

PELTON

THE PELTON & CRANE CO., DETROIT 2, MICHIGAN

PROBLEMS: In a suit for alleged malpractice in treating an injured limb, was evidence of the reputation of the medical college which the doctor had attended admissible? Was evidence of his skill two years after the particular treatment receivable?

COURT'S ANSWERS: No.

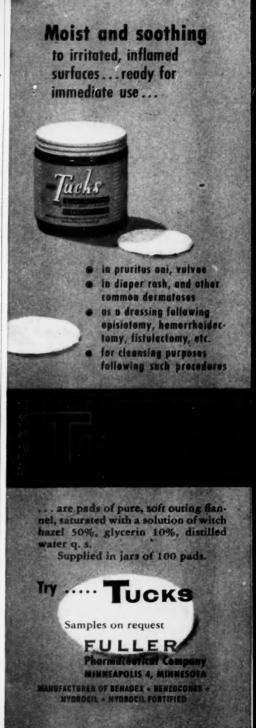
The New Hampshire Supreme Court declared in 1855 that surgical proficiency depends "mainly upon personal exertion and talent, and cannot be measured with legal accuracy by the reputation of the institution at which... studies may be pursued." The court also said that proof of a doctor's skill at a certain date raises no presumption that he possessed it two years before (31 N.H. 119).

PROBLEM: Federal law exempts from taxation amounts received as health insurance benefits. Does the exemption extend to sums paid by an employer to injured or ill employees under a benefit plan?

COURT'S ANSWER: Yes.

The U.S. Court of Appeals, Seventh Circuit, said that it was not necessary that the plan be set up as an insurance certificate or policy and that it was immaterial that employees did not pay a premium. The court noted that one feature of the plan which helped to brand it as insurance was a provision requiring a beneficiary to follow instructions of his or the employer's physician.

The court inferred that exemption was intended to relieve from tax burden the value of benefits received for "ravages of disease and accident" and, therefore, such benefits should not be regarded as part of an employee's compensation (199 Fed. 2d 508).





The patient who insists on devouring his food in a hurry often pays the penalty of upset stomach for his speed with the knife and fork. BiSoDol, the dependable antacid, provides fast relief from stomach upset due to excess acidity by efficiently neutralizing the excess gastric juices that cause upset. And BiSoDol provides long-lasting relief, is pleasant tasting—well tolerated. Whenever your patients require really fast relief from acid indigestion, suggest BiSoDol Mints, Powder or NEW BiSoDol Chlorophyll Mints.

BiSoDoL® tablets or powder



WHITEHALL PHARMACAL COMPANY 22 East 40th Street, New York I6, N. Y.

PROBLEM: An Ohio statute forbids a physician to testify, without the patient's consent, concerning statements or advice made by him to the patient. Under this statute, is a doctor disqualified from giving expert testimony in response to proper hypothetical questions, provided that in answering the questions he disregards what he learned and observed while attending the patient and his own opinion formed therefrom?

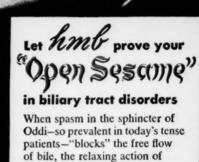
COURT'S ANSWER: No.

So decided the Ohio Supreme Court in a case involving expert testimony in a workmen's compensation proceeding. The doctor in that case answered a hypothetical question with an abstract opinion of a factual hypothesis. The court cited decisions of the appellate courts of Arkansas, Arizona, Iowa, Mississippi, and New York in support of its conclusion (112 N.E. 2d 527).

PROBLEM: A life policy dated December 17 was delivered February 18, under an application dated January 24. The application required continued insurability at delivery of the policy, and stated that applicant had not consulted physicians within five years. After signing the application, but before the policy was issued, the applicant consulted a physician. He died several months later of lymphocytic leukemia. In the insurer's suit to cancel the policy, the nature of the diagnosis was excluded from evidence on objection of the beneficiary who claimed that it involved confidential physician-patient communications. Was the policy void?

COURT'S ANSWER: Yes.

The New York County Supreme Court, Part IX, decided that since medical representation continued to delivery date of the policy, the applicant was bound to disclose consultations after the date of application (112 N.Y. Supp. 2d 385).



When spasm in the sphincter of Oddi—so prevalent in today's tense patients—"blocks" the free flow of bile, the relaxing action of homatropine methylbromide and phenobarbital in Cholan HMB provides "full play" to the potent bile-accelerating action of dehydrocholic acid. This well-conceived dual effect (spasmolytic and hydrocholeretic) explains the excellent results achieved by Cholan HMB in various biliary tract disorders characterized by sluggish bile flow.

Cholanhmb

MALTBIE LABORATORIES, INC. NEWARK 1, N. J.

Maltbie... first to develop American process for converting crude viscous oxbile into chemically pure dehydrocholic acid.

Dehydrocholic acid Maltbie 250 mg. (3 3/4 gr.) Homotropine methylbromide 2.5 mg. (1/24 gr.) Phenobarbital 8 mg. (1/8 gr.)

ENTERIC DETOXICANT OF CHOICE

Resion

POLYAMINE METHYLENE RESIN AND SYNTHETIC SILICATES

"... totally insoluble and nontoxic"2

RESION has been called "the treatment of choice for diarrheas of the type the physician is called upon to treat in his everyday practice," and because its honey and syrup vehicle is so delicious, RESION is willingly accepted by patients of all ages, including infants.

RESION, combining polyamine methylene resin, 10%, sodium aluminum silicate, synthetic, 10% and magnesium aluminum silicate, synthetic, 1.25%, adsorbs an extremely wide range of enteric toxins, yet is "...absolutely nontoxic." 3

Particularly valuable in the treatment of infantile diarrhea, RESION has also proved markedly effective in food poisoning, gastrointestinal infections, and nausea and vomiting of pregnancy.

Dosage for Adults and Children: 1 tablespoonful hourly for 4 doses; then 1 tablespoonful every 3 hours. For infants, same schedule, teaspoonful doses. Nausea and vomiting of pregnancy, 1 or 2 teaspoonfuls on arising, between meals and at bedtime. Resion is supplied in wide-mouthed bottles of 4 and 12 fluidounces.

- 1. Rev. Gastroenterol. 19:660, 1952
- 2. Exper. Med. & Surg. 9:90, 1951
- 3. J. Philippine M. A. 26: 155, 1950

THE NATIONAL DRUG COMPANY



Philadelphia 44, Pa.

 ${\it More Than \, Half A \, Century \, Of \, Service \, To \, The \, Medical \, Profession}$

$Resion \dots for \ rapid, \ complete \ control \ of$

DIARRHEA . . . infants and adults
FOOD POISONING
ENTERIC INFECTIONS
NAUSEA AND VOMITING OF PREGNANCY



Washington Letter

Restrictions on Veteran Medical Care Requested

A HEAD-ON collision between the Eisenhower administration and powerful veterans' associations is in sight for next year.

The issue is one the medical profession has followed closely for thirty years, but one to which the general public has paid little attention. It is the question of what veterans are entitled to free hospitalization, and under what conditions. The facts are not new; the only new elements are the greatly increased number of veterans who are getting free hospitalization for conditions not related to service, and the apparent determination of the Eisenhower administration to do something about the present situation.

But because this problem will be a major one from now on, the facts of the issue are worth a brief review.

> Under the law, all veterans with service-connected conditions are entitled to medical care. This is not disputed.

> • Under the law, veterans whose conditions have no service connection may be hospitalized if [1] beds are available and [2] the men state inability to pay.

• Veterans Administration may not now look behind this statement of inability to pay, despite the fact that study after study shows that thousands of veterans who can pay are getting free treatment, at the cost of the taxpayers and in competition with private hospitals and private physicians.

ians.
(Continued on page 64)



"One thing about a country doctor, you don't make much money, but you sure eat well!"

Aminodrex

Aminodrox

Aminodrox

Aminodrox

Aminodrox

Aminodrox

Heard at the staff meeting . . .



increases the usefulness of oral aminophylline



In the form of AMINODROX, three out of four patients can be given therapeutically effective oral doses of aminophylline.

This is possible with AMINODROX because gastric disturbance is avoided.

Now congestive heart failure, bronchial and cardiac asthma, status asthmaticus and paroxysmal dyspnea can be treated successfully with oral aminophylline in the form of AMINODROX.

Aminodrox Tablets contain 1 1/2 gr. aminophylline with 2 gr. activated aluminum hydroxide.

Aminodrox-Forte Tablets contain 3 gr. aminophylline with 4 gr. activated aluminum hydroxide.

Also available with 1/4 gr. phenobarbital.



DIVISION OF MERCE & CO., M.



Stop those sneak raids with

MELOZETS'

METHYLCELLULOSE WAFERS*



Constant nibbling from morning until midnight adds calories by thousands—the most common cause for overweight. You can help these patients lose weight when you suggest that, instead of a snack, they eat 'Melozets.'

A most important value of 'Melozets' is that they are a "drugless" help to any reducing regimen.

'MELOZETS' look and taste like graham crackers. Each wafer contains 1.5 Gm. of methylcellulose and supplies about 30 calories. They give a sense of satisfying fullness which blunts the appetite.

EASY TO EAT: A wafer with a glass of fluid, between meals or one-half hour before meals.

SUPPLIED: In ½ lb. boxes of about 25 wafers.

FREE DIET SHEETS



For a pad of sheets, each with 42 different 'MELOZETS' reducing menus, and a sample of 'MELOZETS,' drop a note on your prescription blank to Professional Service Dept., Sharp & Dohme, West Point, Pennsylvania.

*Patent applied for

• Veterans Administration now has 122,000 beds available, and will have 130,000 beds when the present building program is completed within the next year.

• American Hospital Association estimates that not more than 50,000 beds are needed to care for service-

connected cases.

The Eisenhower administration now is firmly on record, in at least two instances, as opposing care of most non-service connected cases.

The latest example is the testimony of Joseph M. Dodge, director of the budget, made before a special House committee and released after Congress adjourned.

Mr. Dodge is a member of the President's official family, just below cabinet rank. He is in more intimate contact with the President than many cabinet members. It is not conceivable that he would make a decision as important as this without the full support of the President.

Mr. Dodge testified:

Where is this present unrestricted policy of providing free hospitalization for veterans with nonservice connected disabilities leading us to? The present veteran population, exclusive of persons now in the service, is over 20 million, or approximately 13 per cent of the total population of this country. The male veterans already comprise 40 per cent of the total adult male population. It is, of course, obvious that if the majority of young men are drafted into military service, the time will come when substantially all of the adult male population of this country will be veterans and the Federal Government will be confronted with a critical problem in attempting to provide them with hospital care.

He estimated that if there are no changes in the admission laws, VA

will have to provide 160,000 beds by 1975.

Earlier, Controller General Lindsay C. Warren—also an Eisenhower representative—had told the subcommittee substantially the same thing, although he refrained from making conclusions and let statistics and proved examples of abuses carry his argument for a change.

These spokesmen for Eisenhower were, except for details, calling for the same changes requested by the American Medical Association, American Hospital Association, and a number of other professional groups. All testified before the same subcommittee.

In carrying out a mandate of the annual convention, the AMA now is pressing vigorously for a VA reform on the following points:

Complete and unexcelled medical and hospital care for all service-connected cases





More patients get

'24-hour" pain relief for the rheumatic patient

more complete relief, over

longer periods of time, with

higher freedom from toxic reactions, on

Pabalate Pabalate Sodium Free

Pabelule - Season adaptive, U.S.P. 0.5 Gm. (5 gr.), and perc-anisobersasic addition soft) 0.3 Gm. (5 gr.), in each yellow enteric coated Tables or 5 cc. of Liquid. Pabelula-Sedium Fred.-Ammontum selicytate 0.3 Gm. (5 gr.) and perc-anisobersasic acid (as the putesium poly) 0.3 Gm. (5 gr.) in each Paralim Base soler, enteric aspend Tables.

*Smith, E. T. J. Lunear 20:125, 198

atients and observers in clinical test*agree:

A "Significantly Superior" Cough Medication

- increases respiratory tract fluid almost 200%
 - Reduces coughing spells up to 70%
- Relieves bronchiplor constrictions
 - Improves patient's mood
 - No adverse side effects

Robitussin

Robins

FORMULA: Glyceryl gualacolute 100 mg., and desaxyaphedrine hydrochlorida 1 mg., per 5 cc., in a palatable aromatic syrup.

*Cass, L. J. and Frederik, W. S.: Am. Fract. and Digest of Treat., 2:844, 1951. Report of blind test on 52 haspitalized patients.

A. H. ROBINS CO., INC., RICHMOND 20, VIRGINIA Ethical Pharmoceuticals of Marit since 1878



2] Hospitalization for long-term non-service cases, such as tuberculosis and mental and neurologic diseases, when the veteran himself cannot pay the cost of private care

3] Payment by all other veterans with non-service connected disabilities for their own medical expenses or, when the veteran is medically indigent, payment by the community.

Although not laying down his proposals in specific terms, Mr. Dodge was in general agreement with this stand of the AMA. He would, however, be inclined to accept all long-term non-service cases without a test of the veteran's ability to pay, on the assumption that a long-term illness would deplete

the resources of most applicants anyway.

So far, veterans' associations have not turned on the Budget Bureau, possibly out of consideration for the great influence the Bureau exercises over all VA finances. Nor have they directed their fire at the Eisenhower administration, possibly also for diplomatic reasons.

But the veterans' associations, particularly the American Legion, are moving into a wide-open fight with AMA on this issue, ignoring the fact that the biggest target is President Eisenhower and his administration. With the whole question of veterans' care definitely scheduled for review at the next

(Continued on page 68)

The value of

Azulfidine[®]

RRAND OF SALICVI AZOSIJI FARVRIDINE

in ulcerative colitis

1. J. A. M. A. 151 (1953) : 5, p. 366

2. Postgraduate Med. J. 10 (1951), p. 317 becomes more and more evident. Recently Morrison¹ reported excellent results, confirming the opinion of Bargen² and others. In the New York State Journal of Medicine, 53:1543-1547, July 1, 1953, Pelner, Louis, and Waldman, Samuel: in a paper dealing with adrenal cortex therapy in acute diseases of the liver, state that three of their patients with ulcerative colitis showed great improvement when Azulfidine (formerly Azopyrin) was added to the adrenal cortex therapy. "The combined treatment was singularly effective."

Literature sent on request.



PHARMACIA LABORATORIES, INC.

Executive Offices: 270 Park Avenue, New York 17, N. Y. Sales Offices: 300 First Street, N. E., Rochester, Minn.



READY TO USE

TASTY STABLE









Pediatric

Erythrocin stearat

(Erythromycin Stearate, Abbott)

1-226

Oral Suspension

ESPECIALLY RECOMMENDED

against staphylococcic, streptococcic, pneumococcic infections

ESPECIALLY ADVANTAGEOUS

in children sensitive to other antibiotics or when the causative organism is resistant to them

SUPERIOR

because it is less likely to alter the normal intestinal flora than other oral antibiotics, except penicillin

Offering a new advantage

in antibiotic therapy, *Pediatric* ERYTHROCIN Oral Suspension provides the effectiveness of ERYTHROCIN in a sweet, cinnamon-flavored form. There's no problem in administration—tests show that children really like this orange-colored preparation.

No mixing required. *Pediatric* ERYTHROCIN Suspension is ready for instant use. Tested for stability at extreme temperatures, the drug will remain potent for at least 18 months.

Like ERYTHROCIN tablets, *Pediatric* ERYTHROCIN Suspension is specific in action—*less likely to alter the normal intestinal flora than other oral antibiotics, except penicillin*. Gastrointestinal disturbances are less common, with no serious side effects reported

Pediatric ERYTHROCIN Suspension is indicated in pharyngitis, scarlet fever, pneumonia, erysipelas, pyoderma, certain cases of osteomyelitis and other infectious conditions. Especially indicated in staphylococcic infections—because of the high incidence of staphylococcic resistance to penicillin and other antibiotics.

Recommended dosage is 2 to 3 mg./lb. (4.5 to 6.5 mg./Kg.) at four to six-hour intervals. Thus, one teaspoonful every four to six hours for a 50-pound child. Can be administered before, after or with meals. *Pediatric* ERYTHROCIN Stearate Oral Suspension, representing 100 mg. of ERYTHROCIN per 5-cc. teaspoonful, is supplied in 2-fluidounce, pour-lip bottles.

session of Congress, a showdown between the administration and the veterans' associations is just about inevitable.

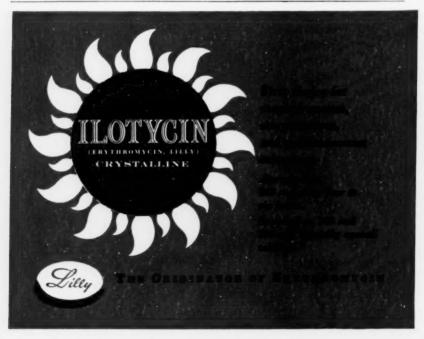
Washington Notes

Regular medical careers in the Armed Forces no longer are legal traps; all 3 services, using somewhat different systems, are allowing particular doctors to resign their commissions. In all cases, however, men who have not served eight years or more have to accept reserve commissions.

The hundreds of draft-eligible doctors who are worried over alert notices from Selective Service have been advised by Defense Department not to move too rapidly in closing out their practices; their real "greetings" are their orders, specifying a date to report for duty. After receipt of these orders, they still have a minimum of sixty days.

One of the questions up for congressional decision next year will be whether the federal government should continue to pay for the medical care and hospitalization of merchant seamen. The system started when the primary concern of Public Health Service was to keep little-known diseases of foreign origin out of this country.

Another issue to come up will be the extent of care the medical services should provide for dependents of military personnel. Defense Department officials now are at-



68 MODERN MEDICINE, October 15, 1953

THE SAFEST AMONG THE MORE POTENT HYPOTENSIVES

- lowers blood pressure by centrally induced vasorelaxation
- hypotensive action independent of alterations in heart rate
- retains its efficacy during prolonged periods
- rarely promotes sensitivity or increased tolerance
- produces warning symptoms of overdosage before the critical level has been reached

These are the desirable pharmacologic and clinical features of Veriloid which establish this alkaloidal extract of Veratrum viride as the safest of the potent hypotensives. Note that your patient need not be hospitalized, can maintain his normal business and social activities, and is not living in constant danger of hypoten-

- no paralysis of sympathetic activity
- no postural hypotension
- no compromise of renal function
- no reduction in cardiac output or cerebral blood flow
- no tachycardia or increase in cardiac work

sive collapse due to sudden changes in posture. No death attributable to Veriloid has ever been reported, yet this drug has enjoyed extensive use during the past five years.

Average initial dose, 3 to 4 mg. three times daily after meals, at intervals of not less than four hours.

An Original Research Product of

RIKER LABORATORIES, INC.

8480 BEVERLY BLVD., LOS ANGELES 48, CALIF.

VERILOID

tempting to put recommendations of a commission into the form of a bill. The plan is to make services standard whether supplied at military installations or by private physicians and hospitals, with the federal government paying all but a token part of the costs.

Another of Defense Department's proposals would have the federal government issue scholarships to students in medicine and other health fields, with recipients obligated for a stated length of service in the Armed Forces or Public Health Service. Bills along this line have been passed over by other congresses.

The Administration shows no interest in exempting physicians from the proposed extension of Social Security. So far AMA has opposed the idea, which presumably will be resubmitted to its House of Delegates. The plan will be offered at the next session of Congress, with good prospects for passage.

The House Ways and Means Committee, which will handle Social Security, also is continuing a study of the proposal to allow doctors and other self-employed to defer tax payments on a portion of their income, which would be put into annuities. The committee may not touch on this in omnibus tax or Social Security bills but will draft a separate bill. Virtually all associations representing the self-employed support the proposal.





"But Doctor, every bite I eat goes to fat,"

claims the obese patient who has probably been cheating on her restricted diet.

AMPLUS keeps the wayward appetite under control and at the same time provides protection against deficiencies in essential Vitamins, Minerals and Trace Elements.



EACH CAPSULE CONTAINS

DEXTRO-AMPHETAMINE SULFATE. 5	mg
CALCIUM 242	mg
COBALT 0.1	mg
COPPER 1	mg
IODINE 0.15	mg
IRON	mg
MANGANESE 0.33	mg
MOLYBDENUM 0.2	mg
MAGNESIUM 2	mg
PHOSPHORUS 187	mg

AM PLUS

POTASSIUM	1.7 mg.
ZINC	
VITAMIN A 5000	U.S.P. Units
VITAMIN D 400	U.S.P. Units
THIAMINE HYDROCHLORIDE	2 mg.
RIBOFLAVIN	
PYRIDOXINE HYDROCHLORIDE	0.5 mg.
NLACINAMIDE	20 mg.
ASCORBIC ACID	37.5 mg.
CALCIUM PANTOTHENATE	3 mg.

J. B. ROERIG AND COMPANY . CHICAGO 11, ILLINOIS





"penny an ounce" to make a full quart of ready-to-feed



• Easy to prepare—only water need be added; closely approximates healthy mothers' milk.

SUPPLIED: S-M-A Concentrated Liquid, cans of 13 fl. oz. S-M-A Powder, cans of 1 lb.



Philadelphia 2, Pa.



THE EDITOR'S PAGE

by WALTER C. ALVAREZ, Editor-in-Chief

Discussing Surgical Fees before Operation

A few weeks before Dr. Frank Lahey died, it was my good fortune to have a long chat with him, during which time we discussed ways of avoiding some of the grievances that the public now holds against the medical profession. We agreed that great annoyance often arises when a patient who has been operated on comes to pay his bill. The patient does not mind so much those charges he knew about beforehand and planned for; what outrages him are big charges that he did not know were likely to come. Sometimes also he is angry because he feels the surgical fee is too large.

Dr. Lahey said that he felt that these annoyances and the resulting arguments and hard feelings should be avoided by giving the patient *in advance* as good an estimate as can be made of all the several charges that are likely to be made during the hospital stay. The patient should know that there will be an operating room charge, an anesthetist's fee, and perhaps a fee for a transfusion and a charge for the donor. There are likely to be amounts due for nurses' meals, for medicines, and perhaps for an oxygen tent.

I asked about the surgeon's fee and the reluctance of surgeons to set this fee in advance. Many say that they do not know beforehand how much work they will have to do. They may open the abdomen to remove an appendix and find a terminal ileitis or a cancer of the colon. Dr. Lahey said, "Oh, when you are doing thousands of operations a year you can quit worrying about that. It will all average out."

He said that for some time it had been his custom to come

to an agreement beforehand with the patient as to the fee. He said this eliminated grievances and dissatisfaction. It might be well if other physicians and surgeons and all managers of clinics and hospitals would try to profit by the experience of one of America's wisest surgeons.

The Beginnings of Life

For many years curious chemists have been wondering how living cells first appeared on this earth. In the beginning, of course, there must have appeared some proteins, and before them amino acids and other building blocks from which proteins can be made.

Recently, Dr. Harold C. Urey, one of America's greatest chemists, had an idea which he turned over to a student, Stanley L. Miller. The idea was that some 250 millions of years ago the atmosphere contained much water vapor, plus hydrogen, ammonia, and methane. The climate may have been pretty warm, and there may have been much lightning.

Accordingly, Miller filled a tube with the above-mentioned gases, together with water and an indicator; he warmed the mixture, and at intervals he sent an electric spark through it. At the end of the first day the fluid turned pink and at the end of a week it was a deep red, showing that chemical changes were taking place. Soon an analysis of the fluid showed the presence of a number of the simple amino acids.

This experiment, of course, does not prove how life began, but it does show that some fairly complicated nitrogenous building blocks of protein could have come into being through natural causes. Once a protein was formed, the next step needed in order to make it live was to find some way of getting it to reproduce itself.

In Dr. Pauling's laboratory in Pasadena he has been showing how proteins can reproduce themselves with what a mechanic would call a template method; each molecule serves as a mold to form another similar molecule, as material forms in contact with it and follows the contours of its surface. But still, as someone recently said, the chemists will have a long way to go before they can make a single ameba. Immensely more knowledge of chemistry is required than anyone has today.

Heart size is a better indicator than heart murmurs of heart strain and shortened life expectancy.

Significance of Systolic Murmurs

PAUL D. WHITE, M.D.

Massachusetts General Hospital, Boston
ROYAL S. SCHAAF, M.D.

Presbyterian Hospital, Newark

TIMOTHY B. COUNIHAN, M.D.

Hammersmith Hospital, London

BUFORD HALL, M.D.
University of Illinois, Chicago

IN spite of numerous and intricate technics and devices for the study of cardiovascular disease, skillful auscultation of the heart remains the most available and reliable means of diagnosis and, to some extent, prognosis.

Paul D. White, M.D., Royal S. Schaaf, M.D., Timothy B. Counihan, M.D., and Buford Hall, M.D., report a study of 1,212 patients with slight to moderate (grades 2 and 3) systolic murmurs, without diastolic murmurs, heard best at the cardiac apex, aortic valve area, or both, as compared with 187 patients with loud and very loud (grades 4 and 5) systolic murmurs heard in the same location, and with 200 cardiovascular patients with no murmurs. The ratio of males to females was 3 to 2 and nearly three-fourths were over 50 years of age in each group.

About two-thirds of the patients in both groups with murmurs and 40% in the group without mur-

murs had coronary or hypertensive heart disease or both. A pronounced difference prevails in the prevalence of rheumatic heart disease, the condition being found in 27% of the patients with loud murmurs, in 3% of patients with slight to moderate murmurs, and in none of the patients without murmurs.

The murmur is in the aortic area in about a fifth of cases with both loud and moderate murmurs. The murmur is apparently always most distinct at either the aortic or apical area in cases of loud murmurs but may be heard with equal intensity in a quarter of patients with lesser murmurs.

Patients with loudest murmurs live shorter lives than patients with lesser murmurs or with no murmurs at all, although some patients live more than fifteen years after a loud murmur is noted. Male mortality is greater than female in all groups. The mortality rate for cor-

The clinical significance of apical and aortic systolic heart murmurs (without diastolic murmurs) as heard with the stethoscope. Am. J. M. Sc. 225:469-474, 1953,

onary or hypertensive heart disease is higher than for rheumatic heart disease.

Heart size is a better indication of the degree of strain on the heart than are murmurs. The fifteen-year mortality rate for patients with loud murmurs is 97% for those with much enlarged hearts com-

pared to 68% for patients with no evident enlargement. In the lesser murmur cases, the rates are 99 and 41%.

Aortic systolic murmurs of any intensity do not have a more unfavorable prognosis per se than the corresponding apical systolic murmurs.

Hypoprothrombinemia in Congestive Heart Failure

CHR. J. BJERKELUND, M.D., AND ESTHER GLEDITSCH, M.D.

PROTHROMBIN values of less than 70% frequently occur with congestive heart failure. This hypoprothrombinemia appears to be independent of both the etiology of the heart disease and the duration of symptoms.

When the prothrombin value is depressed originally, serial determinations serve as a good index of the efficacy of treatment of the acute failure. With recovery, the prothrombin values revert to normal.

The hypoprothrombinemia is apparently directly related to the degree of acute liver congestion and totally unrelated to cardiac cirrhosis. Other tests of liver function are normal except the icterus index, which is elevated in about half the patients with depressed prothrombin values.

Chr. J. Bjerkelund, M.D., and Esther Gleditsch, M.D., reporting on patients observed at the Oslo Municipal Hospital, Norway, find that the commonly used Quick method of determining plasma prothrombin levels is not sensitive enough in the range 100 to 50% to detect most of the depressed values seen in acute congestive heart failure. The Owren method, measuring the combined effect of prothrombin plus the new coagulating factor, proconvertin, is more suitable for detecting moderate lowering of the plasma prothrombin.

With recovery from acute congestive heart failure, the prothrombin concentration increases in the plasma. This fact probably accounts for the often observed increased risk of thromboembolic complications. Many drugs, such as digitalis, aminophylline, mercurial diuretics, and antibiotics, have been suspect in this phenomenon, which, however, is more probably the result of the improved prothrombin synthesis of the recovery phase.

Hypoprothrombinemia—occurrence and prognostic significance in congestive heart failure. Acta med. Scandinav. 145:181-188, 1953.

The possible complications should be borne in mind when instituting collapse therapy.

Complications of Pneumoperitoneum

I. D. BOBROWITZ, M.D. New York Medical College, New York City

THOUGH widely used as collapse treatment of pulmonary tuberculosis, a pneumoperitoneum should not be recommended lightly.

Slight to fatal complications may develop, either by coincidence or as a direct result of air injection.

I. D. Bobrowitz, M.D., lists 18 types observed among 561 cases requiring 24,750 refills. Some disorders, such as bronchial obstruction, were thoracic, and some involved the abdominal cavity or wall, for example, adhesions, effusions, and hernia.

A faulty technic occasionally caused air embolus, emphysema, and other untoward effects. Undue pressure on large vessels produced edema of the legs.

Air should always be injected to the left of the umbilicus, with the subject in Trendelenburg position.

Complications often subside without special care or after removal of air or fluid. In certain cases, pneumoperitoneum is done less often or in smaller amounts or is stopped for several weeks or months, at times permanently.

Mediastinal emphysema, 2 cases. Swelling of the neck and dysphagia occur some hours after injection, and crackling is heard over the precordium. Oxygen is given for Complications of pneumoperitoneum therapy. Dis. of Chest 24:82-95, 1953,

twenty-four hours, and if necessary, abdominal air is withdrawn. Recovery is rapid, and treatment may be resumed in a week.

Right pneumothorax, 2 cases. When injected just under the diaphragm, air may reach the chest through a diaphragmatic lesion or natural opening. Dyspnea and pain are quickly lessened by deflation of the lungs, and an indwelling cannula is connected with underwater drainage.

Bronchial obstruction, 12 cases. Before treatment, tuberculosis of bronchi should be improved by antibiotics. If infection partly occludes a large or small branch, closure may result from elevation of the diaphragm by air, especially when phrenic nerve crush is done.

Overcollapse of lung, occasional. The best technic induces just enough pressure to control diseased areas.

Air embolism, 2 cases, A free airway should be provided for injection, and on aspiration should draw no blood. Treatment for embolic shock includes ox gen, caffeine, and adrenalin. Trendelenburg position may be preferred, or left lateral position to prevent an air trap in the right ventricle.

Subcutaneous emphysema, rare. This condition soon disappears.

Febrile reaction, 2 cases. Fever may start just after induction and persist for several days. The cause may be tearing of adhesions or irritation of former infection sites.

Severe pain, 4 cases. Unimportant shoulder pain is generally felt for a few days, and abdominal or peritoneal discomfort is frequent. But if an ulcer or other condition causes great distress, refills may have to be abandoned for a time or indefinitely.

Abdominal adhesions, 70% of cases. Although most adhesions are too short to affect diaphragmatic movement, elevation may be limited by an adherent liver or spleen. Organs may be pushed down by degrees or the remaining viscera depressed, to make room for air.

Peritoneal fluid, 27 cases. Effusion is generally scant, and even moderate amounts may be tolerable. If necessary, air is diminished or liquid aspirated. Persistent secretion may be allergic, and if the eosinophil count is high, antihistaminics are given. Severe pressure symptoms and acute illness generally mean tuberculous peritonitis.

Intestinal obstruction, 2 cases. An exudative reaction may cause numerous adhesions or encase the entire small bowel in a fibrous sac.

Anatomic change, common. During treatment the stomach is often distorted or displaced, and bowel motility may increase or decrease. Weight loss occurs in 60% of cases.

Acute appendicitis, 2 cases. Symptoms can be misleading, since air may prevent localization of infection, right lower quadrant pain,

tenderness, and rigidity. Fever and abdominal distention are warning signs.

Abdominal air should be reduced and examination performed promptly. Appendiceal fullness or tenderness may be palpated by rectal or pelvic technic, and the nonsegmented blood cell count is high. Laparotomy should be done in all doubtful cases.

Tuberculous peritonitis with fluid pockets, 2 cases. When peritoneal exudate contains tubercle bacilli, pneumoperitoneum should not be done. Effusion and injected air should be removed at once.

Nontuberculous peritonitis, 1 case. For obscure reasons, a huge abscess may form, with quarts of pus containing staphylococci and coliform bacilli. After operation, further air injection may be inadvisable.

Peritoneal insult, 5 cases. Acute mechanical irritation with fever, pain, and tenderness occurs a few days or weeks after induction. After several months, refills may be safe.

Hernia, 16 cases. Inguinal, umbilical, and other hernias should be repaired before treatment, which is started cautiously about four weeks after operation. If operation is refused, a truss or belt is often satisfactory. If hernia develops during the course, injections may continue with or without surgery.

Vascular pressure, 4 cases. When viscera are crowded into the pelvis against large veins, edema may affect the feet and ankles or all of both lower legs. Swelling subsides spontaneously or with temporary reduction of pressure.

Though diagnosis is difficult, several laboratory tests may help distinguish pancreatic cancer.

Carcinoma of the Pancreas

WILLIAM A. KNIGHT, JR., M.D., AND R. O. MUETHER, M.D. St. Louis University, St. Louis

THE differentiation between cancer of the pancreas and chronic pancreatitis requires a familiarity with the early clinical manifestations of carcinoma and the use of roentgenologic examinations and all available laboratory procedures. At best, diagnosis will continue to be elusive until more specific and selective tests of pancreatic function are developed.

The observations by William A. Knight, Jr., M.D., and R. O. Muether, M.D., of 88 cases of carcinoma of the pancreas and 58 cases of pancreatitis show that, although incidence of symptoms varies in the two conditions, no one symptom or set of symptoms is diagnostic.

Of 63 carcinoma patients studied by gastrointestinal roentgenograms, 69% had abnormalities, but in most cases the abnormality was not diagnostic.

Physical findings are scarcely more helpful. Ascites, a large gall-bladder, or a palpable mass may be found with carcinoma of the pancreas, but seldom appears with chronic pancreatitis. Upper abdominal tenderness, rigidity, or masses may occur with chronic pancreatitis also, but are usually seen during exacerbation of the disease and sub-

side rapidly. Jaundice, a palpable liver, and weight loss are of no differential diagnostic significance, though jaundice is transient with the benign condition.

Laboratory tests are still properly regarded as unsatisfactory, but a few shed a little light on this problem.

For instance, fasting and random serum diastase determination is helpful. However, the test must be repeated, as is seldom done for carcinoma of the pancreas. In a group of carcinoma patients, the first tests showed 51% abnormal results, repetition 65%.

The values with early carcinoma tend to be elevated, eventually declining to a minimum constant level with atrophy or destruction of the gland. With chronic pancreatitis, the initial determination is usually elevated but, in contrast to carcinoma cases, subsequent tests will show fluctuations, rarely a progressive decrease to subnormal levels.

Stimulation of the gland with secretin, Prostigmin, and other drugs is likely to lead to elevation of serum diastase values with pancreatitis or ductal obstruction, but in many cases of carcinoma with abnormally low diastase values,

Carcinoma of the pancreas. South. M. J. 46:660-667, 1953.

such stimulation will produce no change.

The glucose tolerance test looks promising but has not yet been sufficiently tried. Apparently, abnormal tolerance indicates extensive destruction of the gland.

Alkaline phosphatase values tend to be higher with carcinoma of the pancreas than with chronic pancreatitis, but the interpretation of this finding is not definite. However, if a patient thought to have pancreatic disease is not jaundiced and has high or normal serum diastase levels and a high alkaline phosphatase, the lesion is probably carcinoma.

Total serum cholesterol, serum albumin and globulin values, and anemia do not appear useful in differentiation.

Occult Blood in Feces

ALBERT I. MENDELOFF, M.D.

THE Gregersen modification of the benzidine test is a far more adequate screening test than the guaiac for detecting occult blood in the feces. These conclusions are reached by Albert I. Mendeloff, M.D., of Washington University, St. Louis, after testing many medical students who ingested various quantities of human blood, either instilled through gastric tubes or swallowed.

The guaiac test regularly fails to reveal 25 cc. of blood loss and often does not show losses of 50 cc. Even daily losses of 30 cc. may not be detected by the guaiac test performed on every stool sample for five to six days. The Gregersen test, however, gives positive results after the ingestion of 3 to 5 cc. of blood and consistently gives 3 or 4 plus results for daily losses of 30 cc. when stools are tested daily.

False-positive reactions with the Gregersen benzidine test do not present a serious problem. Of stools passed by subjects taking ferrous iron, plus a meat-containing diet, only 10% give reactions greater than 1 plus.

The Gregersen modification of the benzidine test is performed as follows:

A mixture of 0.025 gm. of benzidine base and 0.2 gm. of barium peroxide, as dry powders, is dissolved in 5 cc. of 50% acetic acid. A small piece of feces is spread on a white filter paper and mixed with 2 drops of the reagent. The result is read at fifteen to thirty seconds and graded as a 0 to 4 plus reaction. The reaction occasionally fades rapidly after thirty seconds, turning brown. If benzidine dihydrochloride, 0.025 gm., is substituted for the benzidine base, a much more stable color is produced.

Selection of a screening procedure for detecting occult blood in feces. J.A.M.A. 152:798-801, 1953.

For cardiac conditions, complete bed rest adversely affects the patient's circulation and morale,

Armchair Therapy in Heart Disease

NORMAN F. WYATT, M.D., JULIAN R. BECKWITH, M.D., AND J. EDWIN WOOD, JR., M.D.

University of Virginia, Charlottesville

THE time-honored use of strict bed rest in the therapy for congestive failure and myocardial infarction entails hazards and, in some cases, may be physiologically and also psychologically unsound. Much greater benefit is obtained if the patient spends a large portion of the day sitting up in an armchair, find Norman F. Wyatt, M.D., Julian R. Beckwith, M.D., and J. Edwin Wood, Jr., M.D.

Thromboembolism may be a serious or, possibly, fatal complication of prolonged bed rest even when patients receive adequate anticoagulant therapy. Slowing of the circulation of the venous return as well as the pressure exerted in the recumbent position upon the deep veins of the calf and thigh contribute to the formation of thromboses.

Minor disadvantages that accompany prolonged complete bed rest include constipation, with resultant cathartic habituation, and bedsores. The development of generalized muscular weakness, vasomotor instability, and asthenia during bed rest, while not dangerous, may be translated by the patient into cardiac neurosis.

Bed rest may be unphysiologic when applied to congestive failure. Recumbent position does not offer the heart the greatest amount of rest. Cardiac output is greater when a person is lying down than when standing quietly. The recumbent position may cause increased venous return and diastolic filling and a greater load on the left ventricle. With a failing ventricle, pulmonary congestion may result.

Patients with hypertensive heart failure kept recumbent for twelve to twenty-four hours have increased blood volume, hemodilution, greater venous pressure, and lessened vital capacity. The harmful effects of recumbency in cases of congestive failure are obscured by other procedures instituted simultaneously, such as digitalization, low-salt intake, and the use of diuretics. Cardiac patients frequently complain of orthopnea and paroxysmal nocturnal dyspnea while in bed.

Sitting in an armchair has unique advantages for patients with congestive failure. The improvement of mental outlook is often dramatic. Danger of thromboembolism may be lessened. Relief of pulmonary

The abuse of bed rest in the therapy of cardiac patients. Virginia M. Monthly 80:419-425, 1953.

edema and complete or partial clearing of congestive failure may result.

The armchair method of therapy consists of allowing the patient to spend the convalescent period in a comfortable chair rather than lying in bed. On the first or second day the patient is assisted from bed and seated in a chair for fifteen to thirty minutes. The patient's feet should rest comfortably on the floor. Ambulation is not permitted. The patient sits up two or three times on the first day and such sessions are gradually increased by doubling the length of the periods in succeeding

days until six to eight hours are spent daily in the chair.

The program is modified according to the individual. At the onset, the patient who tires is permitted to return to bed with assistance.

The only absolute contraindication to armchair therapy is shock. A patient with deep vein thrombosis should be kept in bed until anticoagulant therapy is established. Extreme debility may prevent a patient from sitting up. Pulmonary edema, congestive failure, and temperature elevation are not contraindications and may actually be alleviated by the armchair treatment.

Test for Peripheral Arterial Disease

B. EJRUP, M.D.

FLUORESCEIN tests after exercise are practical for the diagnosis of obliteration of the peripheral arteries.

B. Ejrup, M.D., of Karolinska Sjukhuset, Stockholm, recommends the following method:

The patient lies horizontal with legs uncovered for twenty minutes. A wheal is produced intracutaneously on the dorsum of each foot with 0.1 cc. of a 1:1,000 histamine solution. The patient then runs ten times up and down a stairway about 3 ft. high, at the rate of either 88 or 160 steps per minute. The patient lies down again and as soon as possible 3 cc. of a 10% fluorescein sodium solution is injected intravenously.

The room is darkened. The wheals are illuminated with ultraviolet light of about 3,650 Angström units and the time is measured up to total fluorescence of the wheal.

With no demonstrable organic arterial obliteration, total fluorescence appears in about thirty seconds at rest, and in about twenty seconds after exercise. In cases with organic vascular disturbances of the intermittent claudication type, total fluorescence occurs in about one minute at rest. After exercise, the circulation time is prolonged to between one and eighteen minutes.

Fluorescein after exercise: a method of investigation in peripheral arterial diseases. Angiology 4:253-267, 1953.

Conjunctival injection is often an early manifestation of the leptospiral diseases.

The Leptospiroses

HAROLD JEGHERS, M.D. Georgetown University, Washington, D.C.

AS the recognition of leptospiral disorders increases, more strains and types are being noted. Well over 20 antigenically specific strains are known and many produce somewhat different clinical manifestations.

The early phase of most leptospiral diseases comprises a striking conjunctival injection which causes no serious trouble. Weeks or even months after cessation of the acute infection, the uveal tract may become involved.

Localization of leptospira to the anterior chamber fluid occurs because of the lack of proteinaceous material there and an agglutination titer which is well below that of Leptospiral infection the blood. should be considered when uveitis occurs in a patient exposed to leptospira by occupation or activity.

Leptospiral nephritis may appear without jaundice. The patient has fever with renal failure, albuminuria and hematuria, and casts appear in the urine. A nephrotic condition may result.

At times, pure meningitis is found with little or no renal or liver damage and which closely simulates an aseptic lymphocytic meningitis of viral origin. The meningitis may relapse or even be chronic. Lepto-The leptospiroses in the United States, Bull. New England M. Center 15:61-71, 1953.

spiral agglutination tests should be made in any unexplained lymphocytic type of meningeal infection. A localized leptospiral meningitis usually has a normal white blood cell count, but the sedimentation rate is increased.

WEIL'S DISEASE

Except for persons who swim, occupation and the disease caused by Leptospira icterohaemorrhagiae are closely correlated, states Harold Jeghers, M.D. The distribution for American cases in order of frequency is: [1] swimmers, [2] sewer workers, [3] fish cutters, [4] laborers, [5] poultry dressers, [6] individuals living in rat-infested houses, [7] abattoir workers, [8] laboratory workers, and [9] veterinarians.

Weil's disease should be suspected when a febrile illness is characterized by sudden onset, usually with a chill, severe prostration, myalgia, conjunctival injection, severe headache, and leukocytosis, particularly if the patient lives in a ratinfested region or handles dogs. The most valuable clue for early diagnosis is a striking degree of ocular injection in a febrile individual.

Hepatomegaly and jaundice on the fifth to seventh day accompanied by albuminuria, casts, and kidnev fai'ure with oliguria and rising nonprotein nitrogen further increase the likelihood of Weil's disease. About 10% of patients have a rash resembling that with measles or scarlet fever, and hemorrhagic phenomena occur in severe cases. apparently primarily from capillary damage.

Because of the early respiratory symptoms, erroneous diagnosis of bronchitis, grippe, or pneumonia is common. When infection is profound, gastrointestinal symptoms occasionally appear early. Cervical adenitis may occur, but generalized

adenopathy is rare.

Usually the spinal fluid is abnormal. Lumbar puncture is beneficial for patients with signs of meningeal irritation. Probability of the diagnosis is greatly enhanced if a pleocytosis of 10 to 300 cells, predominantly lymphocytes, is observed. Xanthochromia during the jaundiced phase is almost specifically characteristic, because bile pigments do not ordinarily enter the spinal fluid.

Only a small percentage of cases are severe enough to have jaundice and oliguria. The nonjaundiced type is rarely diagnosed in this country but is probably quite preva-

lent.

Early, the leptospirae are in the blood and spinal fluid and may be demonstrated by a special culture technic or by inoculation into an animal. During the second week, diagnosis depends on demonstrating the organisms in the urine by animal inoculation or by a rise in the titer for the agglutination, lysis,

or complement-fixation test of the blood.

CANICOLA FEVER

Lept. canicola produces a distinct infection that differs from Weil's disease immunologically and has a lesser virulence and lower mortality. Human beings acquire the disease when infected canine urine is in contact with abraded skin or intact mucous membranes. The carrier state in dogs can be readily treated.

Meningeal signs and skin rash are more frequent in this disease than in Weil's disease, but complications are fewer. A smaller number have jaundice and injected con-

iunctivae.

SWINEHERD'S DISEASE

Hogs, cattle, and horses are the main reservoir hosts for dissemination of Lept. pomona, which causes a disease that is not infrequent in this country. The condition resembles an aseptic lymphocytic meningitis very like choriolymphocytic meningitis.

The diagnosis should be suspected in any person with this classical picture who has had contact with the above animals, especially if the animals have eye infections. Iridocyclitis may be a late sequel.

Agglutinations for Lept. pomona ought to be made in all human cases of iridocyclitis. Gastrointestinal symptoms, prostration, renal manifestations, and injected eyes are seen in about half the cases. but liver involvement is not common. Leukopenia with neutrophilia is frequently found early. Meningeal and spinal fluid pleocytosis may not appear early and are most prominent during febrile relapse.

OTHER INFECTIONS

Pretibial fever, caused by *Lept.* autumnalis, is characterized by fever, headache, muscle aches, leukopenia, splenomegaly, and an erythematous rash typically most obvious over the pretibial area, but at times generalized.

Mud fever is produced by *Lept. grippotyphosa* through contact with infected water or moist areas. The main animal reservoirs are field and bank and wood mice.

The disease resembles a slight attack of Weil's disease without jaundice but often with prominent meningeal signs. A peculiar feature may be inguinal adenitis. Diagnosis depends on the specific agglutination test.

Vitamin D Poisoning

ALBERT WEINSTEIN, M.D.

When unusual symptoms develop in a patient receiving vitamin D, toxic hypervitaminosis D should be suspected. Usually the intoxication develops only after amounts of the vitamin in excess of 100,000 I.U. have been taken daily for several months, but lower doses may be toxic. If the vitamin intake is not limited, the condition can be fatal.

Indications of poisoning include nausea and vomiting, diarrhea, fatigue, weight loss, headache, paresthesias, depression, normocytic normochromic anemia, urinary frequency, nocturia, albuminuria, hematuria, progressive loss in urinary concentrating power, rise in nonprotein nitrogen, elevated serum calcium and phosphorus, with normal alkaline phosphatase, and roentgen signs of diffuse demineralization of bones or periarticular calcification. These symptoms and signs, emphasizes Albert Weinstein, M.D., of Vanderbilt University, Nashville, can appear in any order or combination.

Although many of these conditions also occur with primary hyperparathyroidism, the serum phosphorus and alkaline phosphatase levels in hypervitaminosis D are normal or but slightly elevated, whereas in the endocrine disorder the serum phosphorus is usually low in association with pronounced elevation of the alkaline phosphatase.

Hypervitaminosis D should be prevented but, once developed, must not be overlooked. If the vitamin is discontinued, renal failure and irritation will usually disappear and the metastatic calcification in the kidneys and soft tissue will generally reabsorb.

Vitamin-D poisoning. J. Tennessee State M.A. 46:140-142, 1953.

Prevention of reinfestation is an important consideration in the elimination of pinworms.

Treatment of Pinworms

B. H. KEAN, M.D.

Cornell University, New York City

ATTEMPTS at eradication of pinworms by drug therapy alone are usually unsatisfactory. An understanding of the life cycle of the parasite suggests a rational approach to treatment, remarks B. H. Kean, M.D.

Infestation is acquired by ingestion of eggs, generally from contaminated fingers. The adult parasites mature and live in the large intestine. The male causes little damage, but at night the female migrates from the intestinal tract

	Gentlan Violet	Terramycin	Diphenan	Hexylresorcinol
Age		1 1 1 7 7	M	
1 to 2 yr.	0.009 gm. (3/20 gr.) b.i.d.	0.05 gm. t.i.d.	0.125 gm. t.i.d.	Avoid
3 to 5 yr.	0.009 to 0.018 gm. (3/20 to 6/20 gr.) t.i.d.	0.05 to 0.1 gm. t.i.d.	0.25 gm. t.i.d.	0.3 to 0.5 gm. as one dose
6 to 10 yr.	0.018 to 0.03 gm. (6/20 to 10/20 gr.) t.i.d.	0.1 to 0.2 gm. t.i.d.	0.25 gm, q.i.d.	0.6 to 0.8 gm. as one dose
11 to 15 yr.	0.03 to 0.06 gm. (10/20 to 20/20 gr.) t.i.d.	0.25 gm, t.i.d.	0.5 gm. t.i.d.	0.8 to 1 gm. as one dose
Adult	0.06 gm. (1 gr.) t.i.d.	0.25 gm. q.i.d.	1 gm. t.i.d.	1 gm. as one dose
Administration	One hour before meals	After meals	After meals	On fasting stom- ach in A.M.; two hours later a sa- line purge
Length of therapy	7 days	3 days	10 days	One dose
Toxic symptoms	Nausea, headache, vomiting, abdominal pain, diarrhea, dizziness	Nausea, diar- rhea, procti- tis	Anorexia, diarrhea	Stomatitis if chew- ed; epigastric dis- comfort
Contraindications	Ascariasis; hepatic, cardiac, or gastro- intestinal disease; pregnancy		Renal damage	Ulceration of in- testinal tract

to deposit eggs in the perianal region.

The eggs are embedded in a sticky substance which causes pruritus. The patient scratches the area, and the soiled fingers are then introduced into the mouth, repeat-

ing the cycle.

However, the adult worm lives no more than eight weeks. If reinfestation does not occur, the parasite will be eliminated without treatment. To reduce the worm burden and egg production below the biologic level necessary to perpetuate the disease the following regimen is proposed:

· A "seal-in" type of sleeping garment which efficiently prevents anal contamination of the fingers. A zipper sewed into the flaps of a pajama suit and closed by 2 safety

pins is usually adequate.

 Morning showers to wash away eggs deposited in the perianal region during the night.

· Drug therapy which includes several preparations used in any sequence. Gentian violet, terramycin, Diphenan, and hexylresorcinol are recommended as reasonably effective and safe. A suggested drug dosage schedule is given in the table.

· An anal ointment, slightly antipruritic and anesthetic. Perazil is effective.

· Biweekly enemas employed simply for rectal lavage.

 Usual auxiliary methods of washing hands after the toilet, cleansing the toilet seat once daily, and vacuuming and airing the house once weekly.

· Simultaneous treatment of siblings and playmates.

Metabolic Effects of Oral Licorice

W. I. CARD, M.D., AND ASSOCIATES

INGESTION of crude licorice by healthy persons leads to salt and water retention simulating the effects achieved with desoxycorticosterone acetate. Similar results are obtained after oral administration of glycyrrhetinic acid, a component of licorice, indicating this substance as the active constituent.

W. I. Card, M.D., W. Mitchell, Ph.D., J. A. Strong, M.B., N. R. W. Taylor, M.B., S. L. Tompsett, Ph.D., and J. M. G. Wilson, M.B., of the University of Edinburgh and Western General Hospital, Edinburgh, report that when glycyrrhetinic acid was given to a patient with Addison's disease, weight was regained and the daily urine volume dropped, as did the hemoglobin and packed-cell volume. The changes were reversed when dosage was stopped. These effects resemble those obtained with desoxycorticosterone acetate and cortisone in Addison's disease.

Effects of liquorice and its derivatives on salt and water metabolism. Lancet 264:663-

Urinary control basically depends upon the state of the patient's sphincter mechanism.

Treatment for Stress Incontinence

LAWRENCE R. WHARTON, M.D.

Johns Hopkins University, Baltimore

SIMPLE exercises that are designed to strengthen sphincter muscles of the urethra may benefit or cure stress incontinence.

The condition occurs most frequently in women over the age of 40. However, stress incontinence may exist even in adolescence.

Stress incontinence occurs in a variety of circumstances difficult to attribute to any one factor. The nulliparas and the multiparas, obese and thin may be affected as well as women with senility, neurologic disorders, or without demonstrable gynecologic disorder. Complete prolapse of the uterus or vagina is not always accompanied by incontinence, but incontinence may persist after anatomically successful colpoperineoplasty.

Lawrence R. Wharton, M.D., suggests that the sphincter mechanism in females is not particularly strong and is easily impaired by conditions that increase the pressure or stress on the full bladder or impair the neuromuscular mechanism of urinary control.

Best results in treatment result

from careful medical, gynecologic, and urologic study of the individual patient, finding and treating each condition that might interfere with the function of the urethral and

vesical sphincters. Urethral dilations, chemotherapy, or weight reduction may be needed.

Nearly 75% of the patients are cured or improved by simple exercises consisting solely of the voluntary tightening of the vesical and rectal sphincters. The patient is told to contract the vesical sphincter as if to prevent the escape of urine and, at the same time, to contract the rectal sphincter as if to prevent the escape of gas or fecal material. The contraction exercises should be done fifteen times in the morning, noon, and night and as many additional times as the patient desires.

If stress incontinence persists after operation, chances are excellent that urinary control will be restored by the simple exercises described. Failure may occur with senility, neurologic disease, chronic cough, or other untavorable complications.

If stress incontinence is accompanied by gross gynecologic disorders requiring surgical treatment, such as prolapse of the uterus or vagina or large pelvic tumors, these should be corrected by appropriate surgery. At the same time, if feasible, a Kelly plication of the vesical sphincter should be done.

The nonoperative treatment of stress incontinence in women. J. Urol. 69:511-519, 1953.

Multiple ligation obliterates varicose veins without subjecting the patient to serious operation.

Subcutaneous Ligation of Varicose Veins

MICHAEL G. WILSON, M.D.

Bristol Royal Infirmary, Bristol, England

HIGH saphenous ligation followed by short-interval vein ligations just below the skin, without incisions, is effective therapy for varicosities in the legs.

Permanent ink is used to identify the veins before operation. The incompetent internal saphenous vein is marked off at 2- to 4-in. intervals, and varicose tributaries are inked. A dot is placed where skin punctures will be made, on either side of the vein and about 3/4 in. away from it, and an ink dash is made between the dots. A line is also placed over any large blowouts that need excision.

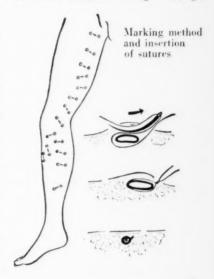
An infrared photograph of the leg preoperatively will indicate the pattern of the varicosities and serve as a permanent record.

Michael G. Wilson, M.D., divides and ligates the saphenous vein flush with the femoral vein through a transverse incision. All terminal tributaries are then divided and ligated.

Using a narrow-ended blade, a nick is made through each of the ink dots. The nick becomes almost invisible when made along the axis of Langer's lines.

A large, ½-circle needle threaded with braided nylon is passed, blunt end first, through one nick,

under the vein, and out the other nick. The needle is reinserted in a similar manner through the second nick and passed under the skin, but over the vein, to emerge through



the original point of entry (see illustration).

The 2 ends of the suture are pulled back and forth once or twice to allow the ligature to slip through the fat and directly around the vein. The suture is then tied with 3 half hitches, and the ends are cut off close to the knot.

A method of treatment for varicose veins. Lancet 264:1273-1275, 1953.

Any skin pucker is straightened out, and the knot disappears beneath the skin, allowing the vein to return to the previous position halfway between the 2 nicks.

A tear in the vein can be controlled with digital pressure, and oozing ceases when the next ligature has been tied. No dressings are needed except in the groin; a sterile bandage is applied to the leg. Ambulation is started immediately, and the patient may leave the hospital the next day.

Two or three days postoperatively a clot can usually be palpated in the isolated vein segments between the ligatures. Some inflammation occasionally develops around the knots, but the usual reaction is no more than slight tenderness, some local edema, and perhaps bruising. The knots cannot be felt beneath the skin, and none are spontaneously discharged. The saphenous nerve may be accidentally caught in a ligature, resulting in a small area of anesthesia above the medial malleolus.

In about ²/₃ of cases all visible varices disappear. In less than a

third of cases slight varicosities remain but only half of these require injections to complete the obliteration. A few patients have more varicose veins remaining than can be obliterated by injections alone, but symptomatic relief is obtained, and no further treatment is advised.

Death from pulmonary embolus is rare with this operation. The possibility of such a catastrophe seems inseparable from the intentional clotting of blood in the leg veins. Probably the best prophylaxis is to get the patient home the day after the operation.

Recanalization of the vein has been reported after ligation with catgut but this seems unlikely when ligatures are numerous and non-absorbable sutures are used. Recurrence from dilatation of previously normal veins, associated with incompetent deep and communicating veins, cannot be certainly prevented. However, recurrences are few if the veins are carefully marked and multiple ligations are used to isolate as many communicators as possible.

¶ THROMBOLYSIS cannot be effected by intravenous administration of trypsin. Harold Laufman, M.D., and H. David Roach, M.D., of Northwestern University, Chicago, find that the main action of the enzyme is anti-inflammatory, resulting in alleviation of pain, erythema, and tenderness. Intravenous infusions of 250,000 units of trypsin in 500 cc. of isotonic sodium chloride solution were given daily at the rate of 1 drop a second to 10 patients with acute thrombophlebitis and 20 with sequelae to the chronic state. No actual lysis was observed, but after four days of treatment the levels of plasma total proteins dropped, chiefly because of decreased plasma globulin concentration.

Arch. Surg. 66:552-561, 1953.

Relationship of papillary breast disease to cancer is controversial, but the bleeding source should be found.

Nipple Discharge and Cancer

ALSON R. KILGORE, M.D., RUTH FLEMING, M.D., AND MANUEL MARIO RAMOS, M.D.

St. Joseph's Hospital, San Francisco

SIMPLE mastectomy should be recommended to women above 40 who have blood-stained discharge from the nipple or demonstrated papillary disease of the breast, because of the possibility of malignancy. Multiple papillary lesions in a young woman also indicate the advisability of such surgery.

Two fundamental questions are raised by the discovery of nipple discharge, state Alson R. Kilgore, M.D., Ruth Fleming, M.D., and Manuel Mario Ramos, M.D: [1] Does the discharge indicate papillary disease of the breast or, possibly, cancer? [2] Will papillary disease, if present, predispose to cancer?

The discharge must first be classified as either secretory, serous, or bloody. Secretory discharge may be milky to brown and typically contains fat droplets but no blood by microscopic examination. Of 190 patients with breast discharges, 32 had this variety. Such a discharge is of little significance and surgery is not necessary.

A true serous discharge may be of almost any color and never contains fat droplets or blood. However, blood is eventually found by repeated examinations in about one-third of patients who have serous discharges, though sometimes not for years. Careful observation is therefore needed, since such a discharge must be treated as a bloody one.

Of 55 with serous discharges, 3 had papillary disease and 1 papillary disease with associated cancer.

Blood-containing discharge must be identified by benzidine test or by microscopic examination, for the gross color is often misleading. Of 103 patients with bloody discharges, with or without palpable mass, operative reports are available for 72. Definite carcinomas are reported in 14, questionable carcinomas in 3, intraductal papillomas in 36, papillary cystadenomas in 9, and no identifiable lesions in 10. Thus, carcinoma appears in approximately 25% of all operated patients found to have bloody discharge, while papillary disease, which may be associated with cancer, is found in almost all the others.

For 6 of the 17 patients with cancer no masses were felt before operation, so that the diagnosis was made at operation in about

The incidence of cancer with nipple discharge and the risk of cancer in the presence of papillary disease of the breast. Surg., Gynec. & Obst. 96:649-660, 1953.

6% of cases with bloody discharge and no palpable mass.

No single method appears to be uniformly successful in locating the source of bleeding. Palpation of a lump and transillumination are both highly inaccurate. Contrast medium roentgenograms frequently do not define widely scattered multiple papillomas and may predispose to mastitis. Exploration with a special probe localizes the lesion in about half of cases. Wedge excision, after the site of lesion has been approximately determined by noting the area from which the discharge can be expressed, is reported as successful in locating papillomas in 20 of 25 attempts.

Multiple papillomas, often widely separated, are found in almost one-third of cases. Bilateral lesions are uncommon; equally uncommon is bilateral bloody discharge. Bilateral secretory discharge is much more frequent.

The question of whether papillary disease is potentially cancerproducing has not been determined. An increased incidence of breast cancer, however, seems to exist among patients with papillary disease. Of 57 patients who had papillary disease with either bloody discharge or palpable mass, 6, or about 1 in 10, are reported to have had carcinomas within five years after local removal. This is far above the chance of occurrence in the general population. Therefore, mastectomy should be done for papillary disease, since the lesions are often multiple and local excision of one is likely to be inadequate.

Cancer of Lung Among Physicians

ERNEST L. WYNDER, M.D., AND JEROME CORNFIELD

THE use of tobacco and the development of lung cancer are apparently closely related among physicians. Since physicians represent a population group homogeneous economically, with little exposure to industrial irritants and with equal access to diagnostic facilities, this finding is significant, believe Ernest L. Wynder, M.D., of the Memorial Center for Cancer and Allied Diseases, New York City, and Jerome Cornfield of the American University, Washington, D.C.

The estimated mortality from cancer of the lung increases from 10 per 100,000 among nonsmoking physicians to 133 per 100,000 among physicians smoking 35 or more cigarets a day.

Figures were obtained from a survey of the exposure to tobacco and other possible respiratory irritants among 63 physicians who died of lung cancer and 133 who died of other types of cancer. No significant differences in exposure to respiratory irritants other than tobacco were noted between the two groups.

Cancer of the lung in physicians. New England J. Med. 248:441-444, 1953.

Surgical treatment of neoplasm of the esophagus has brought benign lesions into sharper focus.

Benign Esophageal Lesions

HAROLD LINCOLN THOMPSON, M.D., AND GEORGE GREGORY, M.D. Los Angeles

SEVERAL nonmalignant pathologic conditions of the esophagus respond well to surgical treatment.

Advanced leukoplakia of the esophagus may be a precancerous lesion. If leukoplakia appears in the mouth, the esophagus should be investigated, since a definite association is thought to exist between leukoplakia and cancer in the upper digestive tract. Treatment by simple dilation is usually successful, but esophagectomy with esophagogastrostomy may be necessary if atresia occurs, find Harold Lincoln Thompson, M.D., and George Gregory, M.D.

A bronchoesophageal fistula can result from traction diverticulum secondary to tuberculosis of the tracheobronchial nodes. Prominent symptoms are dysphagia and coughing immediately after swallowing liquid. The fistula may be repaired with complete recovery.

Benign ulceration is a common precursor of *spontaneous perforation* of the esophagus. During an attack of severe vomiting, the patient may experience excruciating epigastric pain with radiation to the back. Objective signs include collapse, abdominal rigidity, inhibition of peristalsis, and dullness and rales in one side of the chest.

The diagnosis of esophageal perforation can often be made without roentgenograms. The perforation may be closed by simple suture.

Benign stenosis of the esophagus is a common sequel to chemical burns but, occasionally, the cause cannot be determined. Repeated dilations may bring improvement, but esophagectomy with esophagogastrostomy is often needed.

Signs of postoperative esophagitis may appear twenty-four hours after surgery and include salivation, lacrimation, severe pain, and dysphagia. Symptoms usually subside within a week. The lesion has been attributed in some cases to the swallowing of fumes of anesthetic agents. If esophageal stenosis occurs, the area may be resected. The diagnosis is made by roentgenograms or esophagoscopic examination.

Peptic ulcer of the esophagus is apparently more than 4 times as frequent in males as in females. Pain, hematemesis, melena, dysphagia, and regurgitation appear in about half the cases and weight loss in a smaller number. Others have no symptoms.

The most prominent objective finding is anemia, occurring in over a third of patients. Epigastric ten-

Benign lesions of the esophagus. Arch. Surg. 66:775-780, 1953.

derness and cachexia are also noted, but shock is rare. Many patients have no objective signs.

The ulceration is difficult to identify, either clinically or by esophagoscopic and roentgenographic examination. About half the ulcers are found post mortem.

Results following medical therapy are good in slightly over half the cases, but are poor in the remainder. Esophagectomy and esophagogastrostomy may remedy the condition. If stenosis occurs postoperatively, periodic dilation with bougies is done.

Hypercalcemia in Breast Cancer Therapy

B. J. KENNEDY, M.D., DOROTHY M. TIBBETTS, M.D., IRA T. NATHANSON, M.D., AND JOSEPH C. AUB, M.D.

INDUCED hypercalcemia is a serious potential complication of hormonal therapy for advanced breast cancer with osseous metastases. The syndrome is more apt to arise with androgen than with estrogen therapy and apparently occurs only with skeletal metastases, find B. J. Kennedy, M.D., of the University of Minnesota, Minneapolis, and Dorothy M. Tibbetts, M.D., Ira T. Nathanson, M.D., and Joseph C. Aub, M.D., of Harvard University and Massachusetts General Hospital, Boston, and Pondville Hospital, Walpole, Mass.

With the use of either hormone, the development of apathy, anorexia, nausea, vomiting, drowsiness, weight loss, dehydration, disorientation, stupor, coma, or vascular collapse should be considered as presumptive evidence of an impending hypercalcemia, even though the laboratory findings are within normal limits. Associated with the symptoms are an elevation of serum and urinary calcium, electrolyte changes, and sometimes renal insufficiency.

The occurrence of hypercalcemia as a complication of hormone therapy of breast cancer does not contraindicate the general use of hormones. Frequent serum calcium and phosphorus determinations and renal function studies before and during hormone treatment may detect early alterations before symptoms appear.

Therapy for manifest hypercalcemia includes discontinuance of the hormone, adequate parenteral fluid, a low-calcium diet, and intravenous sodium citrate to reduce temporarily the amount of ionized calcium in the blood by formation of a soluble, nonionized calcium citrate complex.

Spontaneous hypercalcemia may occur in patients with extensive osteolytic metastases from various neoplasms, particularly breast cancer.

Hypercalcemia, a complication of hormone therapy of advanced breast cancer. Cancer Research 13:445-459, 1953.

Though ineffective in the early stages of frostbite, ganglionectomy benefits the late sequelae.

Sympathectomy for Frostbite

NORMAN H. ISAACSON, M.D., AND J. BLAINE HARRELL, M.D. George Washington University, Washington, D. C.

GANGLIONECTOMY is useful in the treatment of the late sequelae of frostbite. The excision often heals chronic ulcers, relieves paresthesias and pain, and improves circulation. In earlier stages the operation is not effective.

Norman H. Isaacson, M.D., and J. Blaine Harrell, M.D., performed unilateral ganglionectomy for 33 patients who had bilaterally equal frostbite injury. The untreated extremity in each case was used as the control.

In 24 of the cases, lumbar sympathectomy was done before, and in 9 cases after gangrene occurred. In 7 other cases the operation was used in late treatment of frostbite, three months to thirty-one years after the cold injury.

Most of the patients had sustained the injury by falling asleep in an exposed place after alcoholic bouts. Alcoholism seems to potentiate such accidents by increasing the chances of exposure as well as by causing vasodilatation and stasis in skin capillaries.

Results in the 33 cases show that sympathectomy does not prevent or limit the extent of gangrene when performed early, or hasten healing once gangrene is established. The extremity is not protected against The role of sympathectomy in the treatment of frostbite. Surgery 33:810-817, 1953.

possible later exposures to cold injury.

Oscillometric and skin temperature readings show no dissimilarity between the treated and control sides on subsequent injuries, though a difference is noted after the first attack and treatment.

Late manifestations of frostbite fall into three principal groups: disturbed cutaneous sensation, inadequate circulation, and pain with use. The sensory disorders are of two kinds; both often appear in the same patient. In all but the mildest cases, some residual anesthesia or hypesthesia of the skin results, the range being from complete insensibility to simple dissociation of temperature and pain sense. Hyperesthesia may be adjacent to anesthetic areas or exist alone and consists of hyperirritability to ordinary stimuli. Trophic ulcers commonly appear on the ball of the foot.

Inadequate circulation is manifested by attacks of cyanosis from exposure to slight cold, hyperhidrosis, and intermittent claudication. Pain in the feet with walking, the principal disabling factor, is relatively rare with frostbite.

In all 7 patients with chronic sequelae, the feet became subjectively and objectively warmer after ganglionectomy. Skin temperature increased 2 to 4 degrees by actual measurement, and the oscillometric readings went up as much as 40%. Ulcers disappeared, circulation improved, and symptoms subsided.

In 1 case, paresthesias continued

in the sympathectomized extremity but disappeared spontaneously two months later. Results were so impressive in the other 6 cases that sympathectomies were performed in the control leg in 5, with equally good effects.

Obliteration of Esophageal Varices

GEORGE CRILE, JR., M.D.

TRANSESOPHAGEAL ligation is a safe and simple method of handling bleeding esophageal varicosities secondary to extrahepatic blocks of the portal or splenic vein.

Resection of the involved esophagus and stomach is risky and

has a high attendant morbidity.

Shunt operations have little application in treatment of such blocks. When esophageal varices are large and of long duration, the vein walls are thin and anastomotic channels have developed between the esophageal and azygous systems. Shunt operations to correct portal hypertension do not cause complete regression of decompensated esophageal veins when communications with the azygous system are not protected by valves.

Diffuse portal hypertension may not occur in children or young adults when the block is localized to the splenic vein and tributaries.

Portacaval shunt in such cases is impracticable or useless.

George Crile, Jr., M.D., of the Cleveland Clinic, exposes the esophagus by resecting the seventh or eighth rib. Through a longitudinal incision in the esophageal wall, the 3 large groups of varices are visualized.

Obliteration is accomplished by a running suture placed in the wall of the esophagus beneath the varix. The suture is carried down until gastric mucosa is reached and then up as far as the esophageal mucosa can be pulled down. The esophagus is closed in layers without inversion.

The procedure can be lifesaving. Bleeding is usually well controlled; only 2 of 9 patients, all observed for at least thirty-three months, have bled since operation and the varices are not seen by esophagoscopic and roentgenographic examinations.

The operation has not been applied to varices secondary to hepatic cirrhosis.

Treatment of esophageal varices by transesophageal obliteration. Surg., Gynec. & Obst. 96:573-576, 1953.

Technics for the correction of a single heart lesion may be combined for multiple involvement,

Multivalvular Heart Disease

HOUCK E. BOLTON, M.D., C. P. BAILEY, M.D., WILLIAM L. JAMISON, M.D., AND K. V. S. RAO, M.D.

Hahnemann Medical College and C. P. Bailey Thoracic Clinic, Philadelphia

CONCOMITANT treatment of multivalvular heart disease is within the realm of practicality today although the risk is higher than if either the mitral or aortic lesion is treated alone.

Simultaneous correction of mitral and aortic stenosis offers better results than combined treatment of any other lesions, believe Houck E. Bolton, M.D., C. P. Bailey, M.D., William L. Jamison, M.D., and K. V. S. Rao, M.D.

When aortic and mitral valvular disease coexist, the mitral commissurotomy is generally done first. However, if a decision to treat only one valve is made, the aortic valve should be treated.

Mitral commissurotomy is ordinarily performed with the right index finger through the left auricular appendage. The anterior, posterior, or both commissures are separated in the direction of the commissure. The usual degree of stenosis encountered will scarcely admit the tip of the index finger. Complete separation of the commissures must occasionally be abandoned because a small amount of regurgitation appears.

Mitral commissurorrhaphy or valvular suturing for mitral insufficiency consists of 2 procedures. First, suture of either an everted vein or a narrow strip of pericardium is passed through the wall of the left ventricle. The suture then passes through the more posterior aspect of the septal leaflet and back through the mural mitral valvular leaflet until the opposite end protrudes through the wall of the left ventricle.

A perforation in one end of the suture serves as an eye into which the opposite free end is inserted. Traction is applied, resulting in a noose which tightens and approximates the edges of the valve in the posterior aspect.

The second technic consists of passing the same type of suture through the ventricular wall, through the septal valvular leaflet, and back out through the ventricular wall. This pulls the septal leaflet downward and laterally, directing the flow of blood out of the atrium during ventricular diastole and approximating the edges of the leaflets during ventricular systole.

When mitral stenosis and mitral

Multivalvular heart disease and simultaneous surgical correction, J. Internat. Coll. Surgeons 20:1-10, 1953.

insufficiency are combined, the commissurotomy is done first because regurgitation may diminish, owing to the valvular mobilization, making suturing unnecessary. Palpation of the regurgitant jet which strikes the finger in the left atrium during each ventricular systole indicates whether suturing should be done. The upper limit of regurgitation that can be readily tolerated is 12 to 15 cc. per heart beat.

Aortic commissurotomy is best accomplished by using the Bailey dilator. The instrument is a curved shaft with an expansible end that has 3 wedge-shaped bars parallel to a swiveled central shaft. Since the swivel mechanism allows the bars to expand and adjust to the commissures of the valve cusps, the commissure can be accurately separated without injuring the cusps.

Aortic stenosis is treated with the patient in the lateral position. A left parascapular incision is used and the left hemithorax is entered by way of the fifth intercostal space. The mitral valve is explored if disease is suspected.

Simultaneous occlusion of the left common carotid artery and the

innominate artery at critical moments during mitral and aortic valvular procedures protects the brain. The frequency of the appearance of thrombi in the left auricular appendage, as well as calcific deposits on either or both valves, necessitates such a technic for protection against embolism in the cerebral vessels.

After the left side of the chest is opened, the apex of the lung is retracted downward. The mediastinal pleura is incised above the aortic arch, between the vagus and the phrenic nerves. Sharp and blunt dissection is used to expose the left common carotid and innominate arteries. A strip of umbilical tape is passed around each of the 2 vessels.

The innominate artery is occluded by a Rumel tourniquet. Simple traction on the other tape is used to kink and occlude the left common carotid artery. This maneuver is employed whenever the mitral valve or aortic valve or appendage is manipulated. The vessels may be safely occluded for ninety seconds, with an equivalent time allowed for reestablishing cerebral circulation.

¶ OPHTHALMIC SOLUTIONS may be made more viscous and hence more effective by the addition of methyl cellulose. As the viscosity determines the efficacy of the preparation, Robert C. Welsh, M.D., of Miami suggests that the best concentration, provided by a 0.5 to 0.8% solution of the 4,000 centipoise variety, be specified in the prescription. The 0.5% vehicle may be used with antibiotics and sulfonamides; the 0.5 to 0.8%, with cortisone. The viscid agent is a nonirritating, water soluble, and chemically inert colloid; solutions of the pure chemical do not support bacterial or fungal growth.

South. M. J. 46:819-820, 1953,

Minor psychotherapy dealing with current troubles instead of infantile repressions is often adequate,

Psychotherapy in General Practice

JULIUS BAUER, M.D.

College of Medical Evangelists, Los Angeles

THE patient whose symptoms are partly or entirely caused by emotional reaction to conflict or difficulty may be greatly helped by informal psychotherapy.

The individual's basic neuropathic constitution cannot, of course, be changed. But Julius Bauer, M.D., directs attention to the frequency with which physical distress can be relieved if the sufferer is enlightened as to the emotional cause of the illness and if a solution is suggested.

Diagnosis of psychoneurosis must never be made solely on the grounds that no signs of organic disease are seen. The diagnosis is justified only if, in addition, the patient is a highly emotional person facing an intolerable situation. In fact, the patient may have an organic ailment, necessitating great skill on the part of the physician to disentangle the mixed disorders.

Treatment by back-slapping and expressions such as "don't worry" or "take it easy" usually does not produce the required reassurance. Effective therapy begins with knowledge of the basic principles of the etiology and pathogenesis of psychoneuroses.

Etiologic factors are [1] the patient's inherited constitution, char-Principles of psychotherapy in general practice. Ann. Int. Med. 39:81-91, 1953.

acterized by abnormal emotional reactions and abnormal reactivity of the nervous system, [2] early experiences repressed and reappearing in disguised form, and [3] current troubles.

Past events that were intimidating or demoralizing may have led to the development of the present conflict,"but recollection of such matters will hardly aid in solving the actual problem. The patient suffers from inability to cope with the problem at hand, not from infantile memories.

As the patient's constitution is impervious to treatment, and the repression of early experiences and of socially unacceptable attitudes is probably only a contributory factor, current troubles are the point of attack.

To resolve the present difficulties, psychotherapy is quicker and cheaper than psychoanalysis. Whatever method is employed, success is limited by the constitutional factor, which may bring the patient back with a new ailment some time after the current one is alleviated.

Good technic for psychotherapy is an art involving knowledge of human nature, experience, sympathy, and an authoritative personality. During a careful case history,

questions are directed toward the suspected difficulty. Thus, a young girl might be likely to be frustrated in love; a housewife may have an unfaithful or alcoholic husband. Other patterns are likely for the childless or climacteric woman or the person who must live with a mother-in-law.

Treatment is adapted to the case. For a deeply religious patient, a priest, minister, or rabbi may do better than a doctor. In general, therapy is active in contrast to the passivity of the orthodox psychoanalyst. Instead of letting the patient slowly work out the problem, the therapist explains that the backache comes from the patient's feeling of being overburdened and suggests a way out to a more satisfactory life. Only if convinced that the offered solution is acceptable, will the patient give up the symptoms.

Reactions with Thiocyanate Therapy

CASIMIR A. DOMZALSKI, JR., M.D., LAWRENCE C. KOLB, M.D., AND EDGAR A. HINES, JR., M.D.

PSYCHOTIC delirium may appear during thiocyanate therapy for hypertension if the blood thiocyanate concentration exceeds the recommended safe level of 14 mg. per 100 cc. The complication is serious; death often impends, state Casimir A. Domzalski, Jr., M.D., Lawrence C. Kolb, M.D., and Edgar A. Hines, Jr., M.D., of the Mayo Clinic, Rochester, Minn.

The thiocyanates produce a significant drop in blood pressure in approximately 50% of patients and often succeed where other forms of therapy fail. However, close observation and control of the blood level must not be neglected during such therapy.

The psychosis has two components. One is a direct toxic effect on the cerebral cortex manifested by motor restlessness, disorientation, memory deficits, illusions, and hallucinations. The second component is an emotional disturbance, delusional, maniacal, or depressive, depending on the patient's preexisting personality.

When symptoms of hypertension and mental disturbance are found in combination, the patient should be questioned about taking medicine for high blood pressure. However, the blood pressure may have been reduced to normal just as the delirium arises. The condition must be distinguished from hypertensive encephalopathy, uremia, and arteriosclerotic dementia. The diagnosis depends on the demonstration of high blood thiocyanate with symptoms of toxic delirium. Therapy includes withholding the drug and the administration of fluids. Cyanide antidotes are worthy of trial.

Delirious reactions secondary to thiocyanate therapy of hypertension. Proc. Staff Meet., Mayo Clin. 28:272-280, 1953.

Irreversible alterations may be prevented by careful watch for incipient changes in elderly surgical cases.

Care of Elderly Surgical Patients

E. LEE STROHL, M.D.
University of Illinois, Chicago

THE risk of surgery for elderly patients does not differ greatly from the hazard for other age groups if pre- and postoperative care is well managed. More attention must be given to the patient as a whole, rather than to the single surgical problem at hand, believes E. Lee Strohl, M.D.

Cardiovascular status — Because cardiac disease and peripheral vessel accidents account for more than one-half the deaths in patients past 70, the evaluation of cardiovascular status is mandatory. Electrocardiograms and chest roentgenograms should be made and cardiac reserve estimated by exercise tests.

Postoperatively, elastic stockings and early ambulation will reduce the possibility of thromboembolic complications. Anticoagulant therapy and femoral vein ligation are reserved for cases in which thromboembolic disease develops or when clotting has previously occurred.

Respiratory system — Antibiotic drugs, expectorants, postural drainage, and aerosol therapy combine to reduce the bronchitis, bronchiectasis, and emphysema often found in old patients. A Levin tube inserted into the stomach before surgery will reduce the hazard of aspiration of regurgitated material.

After the operation, coughing, carbon-dioxide inhalations, frequent changes in position, use of blow bottles, and early ambulation will expand the lungs and help prevent atelectasis. Antibiotic drugs are a wise prophylactic measure.

Fluids, electrolytes, and nutrition—Determination of the non-protein nitrogen, sugar, chlorides, sodium, potassium, carbon-dioxide combining power, and total plasma proteins with the albumin-globulin ratio will reveal deficiencies which can be corrected before surgery. Hypoproteinemia, vitamin deficiencies, chronic anemia, or weight loss should be corrected by dietary measures or parenteral administration of whole blood, plasma, amino acids, and vitamins.

After the operation from 2,500 to 3,000 cc. of 5% glucose in water in twenty-four hours is usually adequate to maintain hydration. Elderly patients tolerate a lack of fluids better than excessive fluids. After the first twenty-four to forty-eight hours, 15 to 30 mEq. of potassium may be given daily. Sodium should be used sparingly.

Renal and genitourinary status— The concentration-dilution test together with nonprotein nitrogen determination helps to clarify the

Preoperative and postoperative care of the elderly. Geriatrics 8:377-384, 1953.

functional capacity of the kidneys. Elevation of nonprotein nitrogen and edema may be modified by diet and theophylline diuretics.

Liver status—Function tests such as thymol turbidity, bromsulphalein retention, albumin-globulin ratio, prothrombin time, and urobilinogen will reveal liver damage. Vitamin K or insulin to increase glycogen storage may be needed.

Hormonal function—Hypofunction of the endocrine glands is common. Estrogens and androgens may improve muscle tone and promote a feeling of well-being. Cortisone may decrease postoperative compli-

cations and stimulate vital organs.

Anesthesia—To gain cooperation, the anesthetic agent and the method of administration must be individualized and discussed with an elderly patient. A regional block with procaine, supplemented by inhalation anesthesia, is preferred. Use of a mask will maintain high alveolar oxygen concentration during anesthesia. A nasal catheter may be used to deliver oxygen to the depleted lung field.

To avoid excessive depression of respiration and circulation, pre- and postoperative medication should be kept to a minimum.

Serum Cholesterol in Juvenile Diabetes

MARK S. DINE, M.D., AND ROBERT L. JACKSON, M.D.

Among nonregulated early cases of diabetes in children, serum cholesterol values may vary from 100 to 1,220 mg. per cent. At least half the values fall within the normal range of healthy children. Of the remainder, almost as many will be below, as above, normal.

As control of the diabetes is established with insulin and diet, the serum cholesterol values of almost all patients increase for a short time. After the period of initial regulation, the level appears to change with the degree of control. This change is not an immediate response, find Mark S. Dine, M.D., of Children's Hospital, Cincinnati, and Robert L. Jackson, M.D., of State University of Iowa, Iowa City, but rather comes as a result of weeks or months of a particular degree of control.

Juvenile patients with diabetes under good control will eventually reach normal ranges of serum cholesterol, which are maintained as long as good control continues. When control is poor, the serum cholesterol values fluctuate greatly. Infection seems to lower the serum cholesterol value of diabetic patients.

Thus, an isolated value cannot be used to measure the degree of diabetic control, but serial determinations over a period of time will reflect the kind of control the patient is maintaining.

Serum cholesterol in juvenile diabetes. Diabetes 2:206-214, 1953.

Digitoxin is of great value in therapy of children with a syndrome indicating primary myocardial disease.

Myocardial Disease in Children

HAROLD D. ROSENBAUM, M.D., ALEXANDER S. NADAS, M.D., AND EDWARD B. D. NEUHAUSER, M.D.

Harvard University and Children's Medical Center, Boston

SEVERE heart disease which is neither rheumatic nor congenital occurs in childhood. The syndrome includes [1] cardiomegaly, [2] no significant murmurs, [3] electrocardiographic abnormalities, and [4] normal blood pressure. The clinical manifestations are those of primary disease of the myocardium.

Harold D. Rosenbaum, M.D., Alexander S. Nadas, M.D., and Edward B. D. Neuhauser, M.D., who have studied 45 infants and children with the syndrome, find the most common pathologic processes to be subendocardial sclerosis and idiopathic myocarditis. Glycogenstorage disease of the heart, medial necrosis of the coronary arteries, and aberrant left coronary artery occur more rarely.

While the 5 pathologic entities underlying the syndrome of primary myocardial disease are difficult to distinguish, some factors are of differential value (see table).

Onset of illness is usually rapid and without prodromal symptoms. Respiratory distress with intermittent cyanosis, occasionally with cough, are the dominating signs. Anorexia, vomiting, and failure to gain are common.

Physical examination reveals the

Glycogen-storage disease of the heart

Age at onset of symptoms between 2 and 6 months, never beyond 18 months

Occurrence of a similar disorder in a sibling

No congestive failure with pronounced cardiomegaly

High glycogen content revealed by skeletal muscle biopsy

Aberrant left coronary artery
Age at onset of symptoms between 2 and 6 months

Tachycardia, respiratory distress, cyanosis, and profuse perspiration occurring in attacks, especially during feedings

No congestive failure Roentgen appearance of bulging prominence in region of left ventricle

Medial necrosis of coronary arteries
Age at onset of symptoms less
than 3 months

Coexistence of a systemic disease, especially involving the kidneys

Associated congenital anomalies No congestive failure

Idiopathic myocarditis

Age at onset of symptoms beyond 6 months Abnormal heart sounds

Congestive heart failure Good response of congestive

Good response of congestive failure to digitalis

Subendocardial sclerosis
Clinically indistinguishable from idiopathic myocarditis

Primary myocardial disease in infancy and childhood. Am. J. Dis. Child. 86:28-44, 1953.

patient to be gravely ill, with tachypnea and tachycardia out of proportion to the temperature. Pallor and sweating usually appear, and intercostal retraction is common. Cyanosis is seen in most cases. Gallop rhythm, heart sounds of poor quality, and abnormal breath sounds are frequently heard. Congestive heart failure is shown by hepatomegaly, distended neck veins, and rales, but peripheral edema is unusual.

Roentgenograms show pronounced generalized cardiac enlargement. The cardiac silhouette is globular. Lung fields may be normal or congested.

The electrocardiographic abnormalities ordinarily include left ventricular hypertrophy with T-wave changes or myocardial damage. T waves are flattened or inverted in limb leads and left unipolar chest leads. Auricular hypertrophy and rhythm and conduction disturbances may occur.

If the patients are not moribund

when first seen, response to digitoxin is nearly always good, the digitalizing dose being between 0.02 and 0.025 mg. per pound of body weight over a period of twenty-four hours. The dose may be given more rapidly if necessary.

One-tenth the digitalizing dose is administered daily for maintenance. Digitoxin may be given orally or intravenously. When digitalis is not successful, mercurial diuretics may be beneficial.

Of the 45 patients, 26 have died. Only 7 of the latter received digitalis, whereas 13 of the 19 survivors did. Of the 7 who died after receiving digitalis, 3 who had idiopathic myocarditis showed definite improvement for a time. Almost all the survivors are now symptomfree, with or without digitalis. In about half of cases T-wave changes and left ventricular hypertrophy have disappeared or lessened. In about 50% of cases heart size has decreased. The long-term prognosis with the disease is not known.

¶ PYOGENIC INFECTIONS of the skin caused by various streptococci and staphylococci may be successfully treated with an ointment of 1% Erythromycin in a base of petrolatum and 5% heavy mineral oil. Among 47 patients with primary pyoderma, Harry M. Robinson, Jr., M.D., and Israel Zeligman, M.D., of the University of Maryland, Baltimore, report that the lesions of impetigo contagiosa healed completely in three to nine days, and ecthymatous ulcers in seven to fourteen days. Involution was complete within thirty-one days in 4 cases of sycosis vulgaris and no failures resulted in 3 instances of purulent paronychia. Secondary infection was eradicated in 23 subjects with various dermatoses within twenty-one days without, however, beneficial effect on the basic condition. The antibiotic, a fermentation product of *Streptomyces erythreus*, did not cause sensitivity reactions in any case.

J. Invest. Dermat. 20:405-406, 1953.

Spontaneous Subarachnoid Hemorrhage

H. LOVELL HOFFMAN, M.D. Bath, England

THOUGH a high mortality rate is ordinarily associated with spontaneous subarachnoid hemorrhage, early arteriographic study followed by surgery, in one series of selected cases at least, has reduced the death incidence to 18%.

The hemorrhage is usually caused by a congenital aneurysm, perhaps exaggerated by hypertension or arteriosclerosis, observes H. Lovell Hoffman, M.D. Half the patients are under 40.

The symptoms and signs of rupture of the aneurysm are sudden onset of meningeal irritation and raised intracranial pressure, with or without localizing physical signs. If bleeding is severe, the patient may have a convulsion, consciousness is rapidly lost, and death occurs within a few hours.

With less severe hemorrhage, sudden headache referred to the back of head, frontal region, or one eve is followed by coma or stupor and, in turn, by restlessness and signs of meningeal irritation. Persistent vomiting may occur.

Unless the bleeding is deep so that little blood reaches the subarachnoid space, neck rigidity and Kernig's sign are usually noted. Tendon reflexes may be diminished or absent and the plantar responses Spontaneous subarachnoid hemorrhage. M. Press 5952:521-524, 1953.

may be extensor. Slight transitory pyrexia may appear.

Although papilledema does not form for several days if at all, a large bleb of blood may be seen at once beneath the hyaloid and obscuring part of the retina. Such a bleb, when not large enough to rupture and cause permanent impairment of vision, will absorb slowly.

Localizing physical signs result from [1] direct pressure of the aneurysm on cranial nerves or brain substance, [2] involvement of nerves in blood clot, [3] destruction of brain tissue, and [4] herniation of the temporal lobe through the tentorial opening.

The optic nerve and tracts and the third, sixth, and fourth cranial nerves are involved in that order of frequency; the frontal and temporal lobes are the areas of brain most often destroyed by seepage of blood after rupture. Heterolateral hemiplegia and hemiparesis with later mental impairment may be sequelae.

Decerebrate rigidity results from herniation of the temporal lobe through the tentorial opening.

The cerebrospinal fluid examination is an aid to differential diagnosis, for if blood-stained fluid is allowed to stand and the red cells to settle, the supernatant fluid is colorless in the case of trauma, and yellow with hemorrhage. Samples taken several days after hemorrhage have no red cells, but do show yellow or sherry-colored fluid.

Other causes of yellow cerebrospinal fluid are chronic subdural hematoma, blockage of the spinal subarachnoid space, some cerebral tumors, meningitis, and, occasionally, polyneuritis.

Early, the white blood cell differential in the fluid is the same as that in the blood; later, mononucle-

ar cells predominate.

Spinal tap is dangerous with herniation. If in a case of apoplexy with localizing signs the cerebrospinal fluid is blood-stained, the withdrawal of fluid must be stopped after a few drops have been withdrawn. Isolated third nerve palsy is not a contraindication to tap, providing no other signs of tentorial herniation are noted.

The object of radiologic study is to locate the aneurysm. Plain roentgenograms of the skull have limited value but an angiogram, made with Diodone instead of the less safe Thorotrast, gives great assistance. The carotid artery is ordinarily punctured directly through the skin for the injection of the dye.

Immediately after the injection, which is usually performed with general anesthesia, several roent-genograms are exposed in rapid succession giving lateral and posteroanterior views of the skull and the arterial tree. Besides showing

the presence of aneurysm and other vascular abnormalities, the procedure is useful in localizing other space-occupying lesions within the skull.

Medical treatment involves keeping the patient absolutely recumbent for six weeks after bleeding has ceased. Although regular lumbar punctures are unnecessary, increasing intracranial pressure without herniation can be largely relieved by the removal of a small amount of fluid. Hexamethonium may be considered when the blood pressure is raised.

Surgical therapy, once the aneurysm has been identified by the angiogram, involves either: [1] ligature of the common, and later of the internal carotid artery in the neck, or [2] intracranial approach to the aneurysm with a clip put on the aneurysm's neck or the structure trapped between 2 clips, or [3] a combination of the two procedures.

Carotid ligature is more effective for aneurysms below the bifurcation of the internal carotid. The intracranial approach is more suitable for lesions on the circle of Willis or for an intracerebral clot. The risk of hemiplegia and death from carotid ligation increases after the age of 50; emergency carotid ligation before bleeding is stopped has a poor prognosis.

The mortality of patients treated medically is about 50%. The death rate for surgically treated patients may be much less, but can be reduced only if the patients are under 50 years of age and in good phy-

sical condition.

Condylar impingement on sensory nerve branches may be a readily alleviated cause of trigeminal neuralgia.

Trigeminal Neuralgia and Malocclusion

EDMUND A. SMOLIK, M.D., AND E. J. HEMPSTEAD, D.D.S. St. Louis University, St. Louis

CORRECTION of temporomandibular joint dysfunction will relieve the pain of trigeminal neuralgia in many instances.

The etiology of the paroxysmal attacks of pain involving one or more branches of the trigeminal nerve is not known. The pain is sharp, lancinating, often described as unbearable, extends from one part of the face to another, and is the cause of deep emotional tension.

Relief may be obtained by chemical or surgical interruption of the trigeminal nerve. Unfortunately, surgical intervention will result in permanent sensory loss, and sometimes

also in motor loss.

Edmund A. Smolik, M.D., and E. J. Hempstead, D.D.S., feel that a reconsideration of the entire trigeminal area and relation to the masticatory apparatus is mandatory. Trigeminal neuralgia occurs most often in persons over 40 years of age, especially edentulous women, and the pain is initiated by chewing, sneezing, and coughing; that is, by some movement of the mandibular mechanism.

Little consideration is given to examination of the occlusion of natural teeth and less to the fit of artificial dentures in cases of trigeminal neuralgia. Yet malocclusion produces a shift of the condylar mechanism, and the condyle or capsular components and the diseased tissues associated with this shifting may produce tension on the chorda tympani and on branches of the auriculotemporal nerve innervating the capsular area.

Of 54 patients seen in the past three years at St. Louis University, correction of the malocclusion relieved 36 and failed with 11; partial relief was obtained by 7.

When repositioning fails to relieve, surgery is always available. The conservative correction of malocclusion first may save many from surgery and the risks of paresthesia, corneal disturbance, and possible peripheral seventh nerve palsy.

The following program is suggested for rehabilitation of persons

with tic douloureux:

1] Sedation is attained with barbiturates and codeine. Many patients are in a state of acute distress and deep emotional tension and may require hospitalization.

2] A detailed medical history and record of environmental background are obtained, together with a description of subjective symptoms and discomfort.

3] Complete radiograms are procured of the entire mouth, includ-

Trigeminal neuralgia and mandibular joint dysfunction, Postgrad, Med. 12:419-426, 1952.

ing the dental structure and temporomandibular joint. Study models of natural dentition or of artificial dentures are made. A complete history of denture experience is elicited. Intraoral and extraoral photographs are made of the patient's occlusion, bite, and centric and vertical dimensions.

- 4] The models of the patient's teeth are mounted and studied.
 - 5] Dental radiograms are inter-

preted, but extractions are deferred temporarily, unless teeth are infected, so that healing will not interfere with reconstruction.

- 6] Condyle radiograms are evaluated with reference to occlusion.
- 7] Facial features are studied to determine the effects of occlusal wear. Treatment consists of increasing the vertical dimension, replacing missing teeth, and establishing a new centric position.

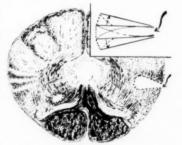
Medullary Tractotomy for Pain Relief

ALBERT S. CRAWFORD, M.D., AND ROBERT S. KNIGHTON, M.D.

INTRACTABLE pain of the shoulder and arm region caused by carcinoma or other conditions can be entirely relieved by severing the spinothalamic tracts in the lower medulla. Using up-cutting and down-cutting knife blades, Albert S. Crawford, M.D., of Thayer Hospital, Waterville, Me., and Robert S. Knighton, M.D., of the Henry Ford Hospital, Detroit, interrupt pain fibers as shown in the illustration.

Satisfactory analgesia is obtained up to the C3 or C2 levels. Side effects include analgesia of the lower part of the body and of all three divisions of the trigeminal nerve on both sides. This latter effect tends to diminish with time, but the relief afforded the shoulder-arm region persists.

The operative approach—made after use of sedation, local infiltra-



tion, and block anesthesia—is through the enlarged foramen magnum after the ring of the atlas has been resected from the midline laterally to the edge of the groove of the vertebral artery. The site of puncture is in the lower medulla, caudad to the lower pole of the olive, cephalad to the decussation of the pyramids, 3 to 4 mm. caudad to the obex, and just ventral to the rootlets forming the 10th and 11th cranial nerves. Little or no pain accompanies the cutting.

Further observations on medullary spinothalamic tractotomy. J. Neurosurg, 10:113-121, 1953.

Status of the underlying cardiac lesion determines advisability of childbearing after healed bacterial endocarditis.

Bacterial Endocarditis in Pregnancy

PAUL PEDOWITZ, M.D., AND LOUIS M. HELLMAN, M.D. State University of New York, New York City

THE successful treatment of subacute bacterial endocarditis with penicillin has introduced a new complication into the practice of obstetrics—the management of pregnancy in cured patients.

Paul Pedowitz, M.D., and Louis M. Hellman, M.D., review the accumulated experience of 102 institutions in which 85 pregnancies were managed after healing of subacute bacterial endocarditis and 35 pregnancies were complicated by the development of the disease.

The maternal mortality rate was 3.5% and the fetal mortality rate 2.9% in the healed group. Of the patients treated for endocarditis during pregnancy, the maternal mortality rate was 14.2% and the fetal mortality rate 4.2%.

The prognosis is significantly influenced by two factors: [1] the cardiac valvular abnormality which preexisted the infection and [2] the additional damage during the healing process of the acute infection.

In the first six months after cure, the cardiac reserve is not stabilized. Valvular healing is being completed and reactivation of the infection is still possible. Pregnancy during this period is associated with an increased incidence of failure and

maternal death. Therapeutic abortion appears to be advisable in such cases before the twelfth week of gestation.

Childbearing has no deleterious effect on subacute bacterial endocarditis that has been healed for over six months. Encouragement or interruption of pregnancy in this group should be based on the severity of the underlying lesion. If pregnancy is put off for many years, age may cause the cardiac status to deteriorate.

The management of pregnancy and labor of patients who have recovered from endocarditis is similar to that for other cardiac patients. The recurrence rate of the acute infection is not increased by gestation. However, chances of recurrence may be decreased by prophylactic antibiotic therapy during parturition. Terramycin or aureomycin should be given with the onset of labor, 500 mg. orally every six hours for seventy-two hours.

When subacute bacterial endocarditis begins during pregnancy, intensive antibiotic therapy should be started as soon as the diagnosis is confirmed by blood culture. Awareness that endocarditis may complicate heart disease in preg-

Pregnancy and healed subacute bacterial endocarditis. Am. J. Obst. & Gynec. 66:294-301, 1953.

nancy will expedite early diagnosis. The treatment is as successful in the pregnant as in the nonpregnant individual.

Therapeutic abortion is advantageous when subacute bacterial endocarditis is cured during the first trimester of pregnancy. When valvular healing is complete, future pregnancies may be permissible. Therapeutic interruption of pregnancy after cure should not be performed during the twelfth to the

twentieth week, for the hazard of the surgical procedure is as great a maternal risk as the continuation of pregnancy.

When the patient has recovered from failure, hospitalization should be continued for the remainder of pregnancy, regardless of the cure of the subacute bacterial endocarditis and the original cardiac status. Management and conduct of labor are similar to that for any patient with heart disease.

Premenstrual Tension in Delinquents

J. H. MORTON, M.D., H. ADDITON, LL.D., R. G. ADDISON, M.D., L. HUNT, M.D., AND J. J. SULLIVAN, PH.D.

Many women prisoners and reformatory inmates have premenstrual tension. The condition is closely associated with excessive estrogen output and hypoglycemia.

Volunteers from the Westfield State Farm, a penal institution at Bedford Hills, N. Y., were studied by J. H. Morton, M.D., H. Additon, LL.D., R. G. Addison, M.D., L. Hunt, M.D., and J. J. Sullivan, Ph.D., of New York City. Half the tested inmates, 249 women, were Negro and half were white. In 58 instances of imprisonment for unpremeditated crimes of violence, such as assault and murder, about 62% were committed in the week preceding the monthly period and 17% during the menses.

Various premenstrual disorders, including nervous and emotional instability, headache, and edema, occurred in 84% of the 249 subjects.

Only 15% reported improvement from placebos but 39% had relief when supplementary milk and cheese were taken between meals and before retiring to maintain blood sugar.

In 79% of cases, prodromal symptoms were alleviated by a combination of the high-protein diet and tablets containing ammonium chloride for diuresis, homatropine methylbromide as an antispasmodic, a stimulant such as caffeine, and vitamin B complex, which increases the utilization of protein and hastens the breakdown of estrogen.

A clinical study of premenstrual tension. Am. J. Obst. & Gynec. 65:1182-1191, 1953.

Aided by surgery, psychology, and prosthetics the amputee may adjust to daily activities of living.

Rehabilitation for Amputees

DONALD A. COVALT, M.D.

New York University-Bellevue Medical Center, New York City

A COMPLETE rehabilitation program for the amputee includes psychologic preparation, selection of site, care of stump, fitting the

prosthesis, and training.

Loss of part of the body requires drastic physical and emotional adjustments, but as amputation is rarely an emergency measure, time is usually available for psychologic preparation. One good method is to have an amputee who is able to walk and work and whose site of amputation is the same as the patient's come in and demonstrate his proficiency. Movies available through the Veterans Administration and other agencies can be brought to the patient's room.

In selecting the amputation site, a surgeon must consider the condition of the blood vessels, available healthy tissue, and other factors. Donald A. Covalt, M.D., lists the most favorable sites as:

• The midthigh amputation allowing about 10 in. of bone below the trochanter is better than the Gritti-Stokes and similar methods which leave longer stumps. An end-bearing stump is more liable to break down and the prosthesis takes longer to put on.

• The best below-the-knee site is onethird of the way down the tibia. The fibula, if not removed, should be shorter than the tibia and tapered. The trouble with the Syme amputation, through the malleoli above the ankle joint, is that the skin of the stump usually breaks down with use. Amputations through the tarsals are unsatisfactory for the fitting of prostheses.

• The best above-the-elbow stump has 8 to 10 in. below the acromion

for leverage.

• The most satisfactory below-theelbow stump ends 8 or 9 in. below the olecranon. Patients with wrist disarticulation are hard to fit and the resulting arm is longer than the uninjured one.

• As much of the hand should be saved as possible.

After-care of the stump includes traction with moleskin adhesive and the use of a divider bar, pulley, and weight until healing occurs. Shrinking and shaping are then done. Two 6-in. Ace bandages sewed end to end are used above the knee, tightest at the lower portion to provide a conical stump and crossed posteriorly to the hip to prevent flexion contracture. Leather shrinkers are used for belowthe-knee stumps and should be 3 to 4 in. longer than the stump for protection.

If necessary to elevate the stump of an above-the-knee amputation, the patient should lie prone with the stump on a pillow.

A patient who can swing through

Pregnancy and healed subacute bacterial endocarditis. Am. J. Obst. & Gynec. 66:294-301, 1953.

on crutches and climb stairs with crutches and the remaining leg is considered a candidate for a prosthetic device for walking, other factors such as age and general condition being favorable. In fitting, the amputee's activities are taken into consideration; for instance, a lawyer can use a lighter leg than a farmer. Artificial legs are of metal, willow wood, or plastic, arms of a plastic called Selectron.

A patient who has lost an arm is taught in the occupational therapy department until proficiency is sufficient for the ordinary functions of daily life. Then the department sets up a job situation comparable to the one the amputee expects to undertake so that the patient can test ability to resume employment. Lower extremity training in the physical therapy department teaches the patient to climb stairs and walk on uneven ground.

Nonparalytic Cases of Poliomyelitis

EUGENE MOSKOWITZ, M.D., AND LAWRENCE I. KAPLAN, M.D.

DIAGNOSIS of nonparalytic poliomyelitis should not be made until complete muscle testing has been done after the patient has resumed usual physical activities.

Eugene Moskowitz, M.D., and Lawrence I. Kaplan, M.D., of Grasslands Hospital, Valhalla, N.Y., by examinations of 75 patients with nonparalytic poliomyelitis, one and one-half to six years after the onset of illness, find that 38.6% have slight weakness in one or more muscles, principally the calf and quadriceps groups. Almost 25% have symptoms referable to the site of weakness. Many have increased general fatigability and emotional disturbances such as irritability, instability, and stuttering. No relation exists between the duration of spasm in the hospital or loss or diminution of tendon reflexes and the eventual onset or site of muscular weakness.

The diagnosis of nonparalytic poliomyelitis should not be made on the basis of a single examination. Multiple, staged tests of the general condition and activities of the patient are best. Diminished work tolerance in a muscle that is but little involved becomes manifest only after strenuous activity. This condition does not prevail during the acute and early convalescent stages.

The average hospital stay with nonparalytic poliomyelitis can be significantly reduced provided the patient is free of spasm and has had multiple tests for muscle weakness. When the patient is afebrile and has no muscle spasm or respiratory difficulties, mobilization under supervision has no adverse effect on eventual function.

Follow-up study in seventy-five cases of nonparalytic poliomyelitis. J.A.M.A. 152: 1505-1506, 1953.

Send in Your Nominations for the

MODERN MEDICINE

Award

for Distinguished Achievement

Readers of *Modern Medicine* will nominate the persons to receive the Modern Medicine Award for Distinguished Achievement. Any physician, teacher of medicine, or medical investigator is eligible for the award. His work may be in clinical or experimental fields. Nominations may be based on a notable report this year or on cumulative contributions to medicine.

Walter C. Alvarez, M.D., Editor-in-Chief MODERN MEDICINE	
84 South 10th Street, Minneapolis 3, Minne	sota
I recommend	M.D.,
of	for
The Modern Medicine Award for	r Distinguished Achievement
in recognition of	
Nominator	Address

MODERN MEDICINE, October 15, 1953 113

SPECIAL EXHIBIT

Transabdominal Gastroscopy and Coloscopy

Stanley C. Hoerr, M.D., and Rupert B. Turnbull, Jr., M.D. Cleveland Clinic, Cleveland

Why employ endoscope at laparotomy?

- Shallow, flattened ulcers or tumors of stomach or colon not palpable and not producing visible serosal changes often may be readily seen by direct vision.
- Small movable lesions like pedunculated polyps may be readily seen, although difficult to find by any other method.
- Lesions at the gastric cardia may be made accessible for direct inspection.
- Colotomy or gastrotomy for endoscopy permits air distention and visualization of stomach and large segments of colon.



Special indications for use

STOMACH

- When the stomach seems "negative" but roentgenograms suggest organic lesion
- When careful gastric exploration is needed
- When there is active bleeding from an unknown source

COLON

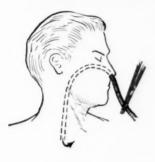
- To locate a polyp shown by roentgenogram but not palpable at time of surgery
- To search for additional polyps at polypectomy
- To locate and fulgurate additional small polyps not shown by roentgenogram
- To locate satellite lesions while resecting colon for cancer



From a presentation at the American Medical Association Convention in New York City.

TECHNIC — STOMACH

- Usual preoperative cleansing of stomach by lavage
- Rubber (Levin) suction tube in place at operation



Anesthetist clamps off suction tube during examination to permit inflation . . .



Enterostomy clamp across upper jejunum or duodenum to prevent undesirable inflation of small bowel with transmitted air

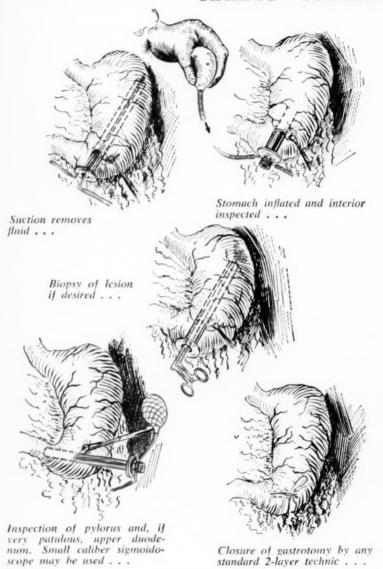


Site and direction of gastrotomy opening made only large enough to admit sigmoidoscope . . .



Sigmoidoscope introduced with an obturator. A Babcock clamp makes opening airtight . . .

TECHNIC - STOMACH



• Removal of clamp across upper jejunum and off Levin tube

scope may be used . . .

TECHNIC — COLON

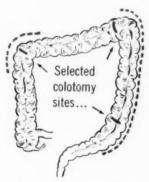


Surgical approach for polypectomy and coloscopy

- Vertical component can be made for polyps of upper sigmoid and descending colon.
- Oblique component added for mobilization of splenic flexure and access to transverse and right colon.
- · Anatomically sound

Procedure for transcolonic polypectomy and coloscopy

- Locate polyp by palpation
- Excise polyp and . . .
- Introduce sigmoidoscope through colotomy site to search for additional polyps. Fulgurate small satellite lesions; use colotomy for larger lesions. If polyp is not palpable but evident by roentgenogram, make colotomy at probable site and introduce scope to find lesion.



Peritoneal incision to free and deliver left side of colon



Scoping colon

TYPICAL USES OF TRANSABDOMINAL GASTROSCOPY



Questionable tumor at cardia

- Roentgenograms on two occasions: filling defect at cardia
 At operation: stomach normal
- Gastroscopy adds assurance that no lesion is overlooked.

Questionable gastric ulcer



Roentgenograms show gastric ulcer.



At operation stomach normal except for gastroscopic examination, which showed ulcer scar verified microscopically after gastric resection

TYPICAL USES OF TRANSABDOMINAL GASTROSCOPY

Questionable antral lesion — polyp found





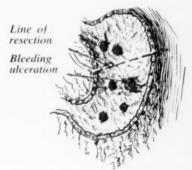
- Gastric roentgenograms equivocal (patient had gallstones)
- At operation: stomach normal except for 3-mm. antral polyp seen only by gastroscope

Active massive bleeding—source unknown

- No roentgenographic studies
- At emergency operation, many sarcomatous nodules in stomach and liver. Which lesion is bleeding?
- The bleeding ulceration was seen by gastroscope and resection was done just above. Recovery was uneventful.



Specimen: Hodgkin's sarcoma



Special Article

Physical Modalities in Dermatology

JUNE CAROL SHAFER, M.D.*

Arlington, Va.

CAPT. E. RANDOLPH TRICE, M.C., A.U.S.† Washington, D. C.

Prepared for Modern Medicine

THE majority of agents used in physical therapy have their primary effects upon the skin and for this reason offer valuable aids in the management of numerous cutaneous diseases.

The field in which any one of the methods is more useful than another type of treatment is narrow. When fields of usefulness overlap, the particular needs of the individual patient should determine the selection of therapy.

Electrosurgery is used for the treatment of numerous benign and malignant neoplasms of the skin. Indications for galvanism are few; as a practical matter galvanism is employed chiefly in cases in which cosmetic results are particularly important. Thermocautery may be useful in various types of benign or malignant tumors, chemical cautery largely for areas with excessive granulation tissue. Similar overlapping and restricted uses are found with the other methods of physical therapy prescribed in dermatology.

TABLE 1. PHYSICAL MODALITIES

Diathermy

Medical Surgical Electrode

Electrodesiccation Electrocoagulation Electrocutting

Galvanism

Electrolysis Iontophoresis

Cautery

Chemical Thermocautery

Cryotherapy

Solid carbon dioxide Liquid nitrogen Ethyl chloride

Light radiations

Infrared rays Ultraviolet rays

Balneotherapy

Baths Wet dressings Massage Posture and strapping

*From the Department of Dermatology and Syphilology, Georgetown University School of Medicine, Washington, D. C., and the Dermatology and Syphilology Section, Walter Reed Army Hospital, Washington, D. C. †From the Dermatology and Syphilology Section, Walter Reed Army Hospital, Washington, D. C.

Many of these modalities may be employed by the nonspecialist who has developed sufficient skill and judgment. The use of other methods, including radiotherapy, should be limited to physicians with special training. Table 1 summarizes those technics, other than radiation, that are valuable in dermatologic practice.

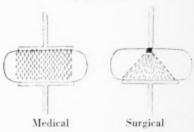
DIATHERMY

The generation of heat within tissue for therapeutic purposes by high-frequency electrical currents is known as diathermy.

Medical diathermy is based on the application to the body of 2 large electrodes of almost equal size. A current produces heat between these electrodes that is insufficient to cause tissue destruction but adequate to produce beneficial effects. Its indications in dermatology are limited.

Surgical diathermy is achieved by the use of a small active electrode and a large indifferent or dispersive electrode. The heat from the highfrequency current is concentrated at the active electrode and causes cell destruction and dehydration locally. Electrosurgical procedures are of wide value in dermatology.

DIATHERMY



Classic methods of employing surgical diathermy are summarized in Table 2. Adequate anesthesia is obtained by local or block infiltration of a procaine solution; occasionally general anesthesia is indicated. Volatile anesthetizing agents should not be used because of the danger of explosions.

The selection of a technic depends upon the amount of tissue destruction required. The benign lesions, such as verrucas, are treated

TABLE 2. METHODS OF SURGICAL DIATHERMY

Form	Current	Technic	Tissue Effect
Desiccation	Monoterminal	Needle or ball active electrode held at distance from skin or just beneath the surface	Dehydration or mum- mification of tissue; thrombosis of super- ficial vessels
Coagulation	Biterminal	Needle or ball active electrode locally with large dispersive electrode at distant site	Coagulation or necro- sis of tissue; sealing of small vessels
Cutting	Biterminal	Fine needle or loop active electrode locally with large dispersive electrode at distant site	Molecular disruption of individual cells immediately in path of the active electrode: sealing of vessels

lightly by monopolar desiccation with minimal scarring.

Many types of cutaneous malignant growths can be completely destroyed by adequate desiccation or coagulation. Postoperative healing is often accelerated by the local use of ointments incorporated with such antibiotics as neomycin, bacitracin, or polymyxin. Surgical diathermy may be combined with curettage or followed by superficial radiation therapy. Specimens for histologic study should be obtained from suspected malignant neoplasms or from lesions with doubtful clinical diagnoses.

Surgical diathermy is indicated for such benign conditions as verrucas, adenoma sebaceum, telangiectases, hypertrichosis, certain keratoses, papillomas, rhinophymas, and pyogenic granulomas. There is no general agreement regarding the use of electrosurgery for the destruction of pigmented nevi. this method is selected, complete removal of the lesion is indicated and a specimen should be obtained for histologic study. Clinical judgment alone is not sufficient to differentiate a benign dermal nevus from the premalignant or junction type of nevus or from a melanoma.

Malignant tumors, such as selected types of basal or squamous-cell carcinomas and Bowen's disease, may be treated with cure rates comparable to other methods and with excellent cosmetic results.

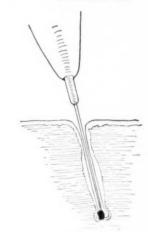
Familiarity with the technic is necessary to insure the adequate removal of malignant neoplasms. Failures occur when lesions are misdiagnosed or are incompletely removed. Electrosurgical methods are not applicable to all cutaneous malignancies; scalpel excision or radiation therapy may be preferred.

Hazards of electrosurgery are secondary infection, hemorrhage, or hypertrophic scarring with keloid formation.

GALVANISM

Galvanic or direct electrical currents may be used for *electrolysis*. This technic is based on the destruction of tissue with the negative pole of a galvanic current. Contact with the patient is made by electrodes connected to the positive and negative poles of a battery.

ELECTROLYSIS



Epilation of hair



Transfixation of tumor

Voltages of 22.5 and milliamperages of 0.25 to 1 are usually utilized.

Although not applicable to malignant lesions, electrolysis may be

THERMOCAUTERY



employed for hypertrichosis and removal of superficial lesions such as verrucas, adenoma sebaceum, telangiectases, and spider nevi, where the cosmetic results are especially important.

Secondary infection and pitted scars may be sequelae. Diathermy technics may be as effective and less time consuming.

Iontophoresis, or common-ion transfer, is the introduction of chemical substances in solution into the skin by direct currents. The active electrode is connected to either the positive or negative pole, depending on the sign or charge of ions of the particular drug indicated. Drugs most commonly used are acetyl-β-methylcholine (Mecholyl) for scleroderma, certain peripheral vascular diseases, and stasis ulcers; copper or zinc sulfate for derma-

tophytosis, chronic eczema, and chronic ulcerations; histamine for rheumatic diseases; and antihistamines for allergic diseases.

Prolonged local effects may be produced by this method with little systemic reaction. The procedure, however, is cumbersome and time consuming, and the effectiveness is somewhat controversial.

CAUTERY

Application of chemicals or heat to produce local destruction of tissue is called cautery.

Chemical cautery may be an effective method of therapy in dermatologic practice. An example is the application of silver nitrate solution to areas of excessive granulation tissue.

Thermocautery is employed for the destruction of hyperplastic or neoplastic lesions. The cautery knife is made red or white hot by heating in a flame or, usually, by an electrical device and is applied directly to the skin or mucous membrane. The effect of the heat is localized to the area in contact with the instrument and is therefore relatively easy to control.

Cautery is indicated for localized areas of leukoplakia, small benign tumors, or hypertrophic lesions, such as rhinophyma, although the method is now less popular among dermatologists than in the past. Contraindications and hazards are essentially those of electrosurgery.

CRYOTHERAPY

Although the agents used for refrigeration are chemicals, they produce the physical effect of cold on the skin. Solid carbon dioxide, liquid nitrogen, and ethyl chloride are most frequently used. Light applications of these chemicals will result in erythema, desquamation, and exfoliation; heavier applications cause vesiculation or tissue necrosis. Final effects depend upon the temperature of the material, duration of application, and amount

of pressure applied.

Solid carbon dioxide, with a temperature of -79° C., may be applied to lesions in a pencil shape with protection of the normal skin. This substance is available from commercial sources as the solid "dry ice," or from tanks containing the compressed carbon-dioxide gas, or from individual cylinder apparatuses, such as the Kidde device. With this instrument, small cartridges are punctured to release the gas in a plastic tube as "snow," which is solidified by a plunger into a "pencil" of solid carbon dioxide. The preparation may be applied for five to thirty seconds or more, using varied pressures. Powdered carbon dioxide, made into a "slush" with acetone and precipitated sulfur, is useful for the treatment of acne vulgaris and postacne scarring.

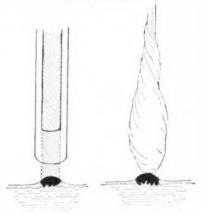
Liquid nitrogen, available from the manufacturers of gaseous oxygen, is delivered in lightly capped thermos-type containers. Application is made with cotton swabs which have been dipped into the liquid. The temperature of liquid nitrogen is -190° C., so that only momentary touches on the skin are required to produce instantaneous freezing.

The temperature of liquid oxygen

is -187° C. Its effects compare with those of liquid nitrogen. Because of inflammability and explosiveness, the material is contraindicated for general use.

These chemicals are useful for treatment of superficial hemangiomas, acne vulgaris and postacne

CRYOTHERAPY



CO2 pencil

Nitrogen swab

scarring, keratoses, verrucas, chronic discoid lupus erythematosus, and other benign hypertrophic lesions. However, overenthusiastic therapy, particularly of hemangiomas, may result in excessive scarring. Although used experimentally, these methods are not applicable for therapy of malignant neoplasms of the skin.

Ethyl chloride sprayed on the skin produces superficial refrigeration and anesthesia, although the liquid is not suitable as an anesthetic in electrosurgical procedures because of the danger of ignition. It is useful in the treatment of larva migrans infections.

LIGHT RADIATIONS

The radiations produced on either side of visible light in the electromagnetic spectrum are designated infrared and ultraviolet rays. Infrared radiations are thermal and instantaneous in effect and are occasionally used for chronic dermatoses and indolent ulcerations.

Ultraviolet radiations are biologically specific and insidious in action. The earlier vogue for their wide therapeutic use is now being reversed. The adverse effects are to be emphasized when these rays are used for the treatment of patients who have light-sensitive dermatoses. individuals receiving such photosensitizing drugs as sulfonamides, or those with debilitating general conditions, such as tuberculosis.

Ultraviolet rays may cause ervthema in the form of active hyperemia, desquamation, vesiculation, or pigmentation. They have a mild bacteriostatic effect on the skin. The sun, carbon arc lamps, and the various mercury vapor lamps are common sources of therapeutic ultraviolet rays. Among these, the mercury vapor lamps producing wave lengths of approximately 2,900 to 3,500 angstroms are employed most frequently in dermatologic practice.

Ultraviolet light therapy beginning with suberythema doses is usually administered either to localized areas or to the entire body. Unnecessary exposure of the patient and operator to this modality must be avoided. The eyes of patient and attendant should be carefully protected.

This therapy may be beneficial in such diseases as acne vulgaris, seborrheic dermatitis, sycosis vulgaris, chronic eczematoid dermatitis, psoriasis, and parapsoriasis, but the numerous light-sensitive eruptions may be severely exacerbated. Localized dermatoses. chronic discoid lupus erythematosus, may be disseminated systemically by ultraviolet radiation.

OTHER METHODS

Balneotherapy—medicated baths, soaks, and wet dressings-is commonly used in treatment for acute inflammatory dermatoses.

Massage may be beneficial in certain types of alopecia, keloids, and scars. Massage with cocoa butter, petrolatum, or anhydrous wool fat is of great value in the management of localized and systemic scleroderma.

Posture and strapping is one of the oldest and best treatments for stasis dermatitis and stasis ulceration. The classic Unna paste type of boot may be of benefit in therapy not only for conditions caused by stasis, but also for chronic hypertrophic lesions of the extremities, which often improve with occlusion.



Medical Forum

Discussion of articles published in Modern Medicine is always welcome. Address all communications to The Editors of Modern Medicine, 84 South 10th St., Minneapolis 3, Minn.

Drugs for Suppression of Appetite*

QUESTION: Is suppression of appetite by drugs necessary in the treatment of obesity?

Comment invited from
BERNARD I. COOPERSMITH, M.D.
HARRY S. DOUGLAS, M.D.
A. W. PENNINGTON, M.D.
SPENCER BAYLES, M.D.
A. D. JONAS, M.D.
HILDE BRUCH, M.D.
S. WILLIAM KALB, M.D.

► TO THE EDITORS: Drugs which suppress appetite, although not necessities, are certainly important adjuncts in the treatment of obesity, as Dr. S. C. Freed has noted.

Such unpleasant symptoms of low-calorie diets as hunger pangs, irritability, faintness, and lethargy are alleviated by these drugs. This is of special help during pregnancy when weight control is important, but often difficult.

The medication of choice for most patients is a salt of dextroamphetamine. Recently, a sustained release capsule has been introduced which exerts an anorexic effect for approximately eight to twelve hours. This dosage form has an obvious advantage: A single Spansule con*MODERN MEDICINE, June 1, 1953, p. 83.

taining 10 or 15 mg, of the medication, taken in the morning, suppresses the patient's appetite all day.

The objection has been sometimes raised that in certain patients cessation of medication results in a return of the lost weight. To this, with due apologies, I would paraphrase an old quotation: "Tis better to have lost and loved, than never to have lost at all."

BERNARD I. COOPERSMITH, M.D. Chicago

To the editors: The problem of weight reduction in the obese is solved best by any method that reduces food intake to or below the level of food energy requirement. A great deal can be accomplished by helping the patient to adjust certain psychologic problems that engender a compulsion to eat more than is necessary. Some success is possible by establishing a dietary discipline for a limited time.

All of us who meet these problem patients daily realize that very shortly we come to a point of diminishing return. At this point the adrenergic drugs become a boon and salvation to patient and doctor.

(Continued on page 130)

For effective antibacterial therapy of SINUSITIS, RHINITIS, OZENA: FURACIN®

without interference with natural defense mechanisms:

FURACIN NASAL

plain . with ephedrine . with Neo-Synephrine*



Some advantages of Furacin:

- · no slowing of ciliary action
- no delay of healing
- no interference with phagocytosis
- · no inhibition of nasal lysozyme

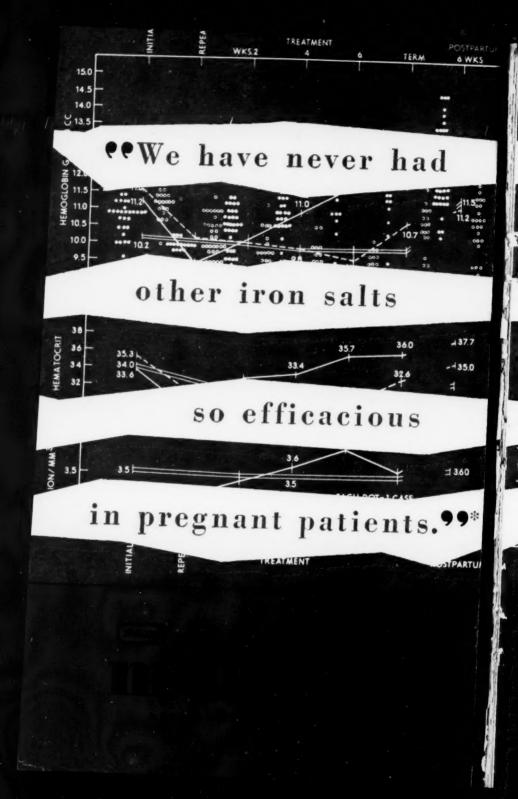


Formulae: Furacin Nasal plain contains Furacin 0.02% brand of nitrofurazone N.N.R. dissolved in buffered, isotonic, aqueous solution. Furacin Nasal with ephedrine contains ephedrine*HCl 1%. Furacin Nasal with Neo-Synephrine* contains phenylephrine 0.25%. ½ fl. oz. bottles.

• Neo-Synephrine is the registered trade mark of Winthrop-Stearns, Inc., for its brand of phenylephrine which is contained in this solution.

EATONING

OTHER DOSAGE FORMS OF FURACIN INCLUDE: VAGINAL SUPPOSITORIES • SOLUBLE POWDER • URETHRAL SUPPOSITORIES



And now the only Complete hematinic containing Mol-Iron

mol-iron e.m.f.

(ERYTHROCYTE MATURING FACTORS)

—provides adequate specific therapy for *all* anemias susceptible to oral antianemic therapy.

Contains all factors known to be necessary in erythrocyte maturation.

EACH MOL-IRON E.M.F. CAPSULE CONTAINS:

mol-iron:

Ferrous sulfate	195 mg.
Molybdenum oxide	3 mg.
Vitamin B ₁₂ Activity Equivalent**	10 mcg.
Gastric substance	250 mg.
Folic acid	0.85 mg.
Ascorbic Acid	50 mg.
Desiccated Liver	100 mg.

^{**}As in streptomyces fermentation extractives.

OTHER MOL-IRON DOSAGE FORMS TO MEET THE REQUIREMENTS OF PATIENTS FROM EARLY INFANCY THROUGH OLD AGE.

mol-iron with calcium and vitamin D

—for pregnant and lactating patients.

mol-iron with liver and vitamins

—for geriatric patients and those with low nutritional reserves.

mol-iron tablets

-for older children and adults.

liquid

υi

-where liquid medication is preferred.

drops

-palatable, prophylactic drop dosage.

*Dieckmann, W. J., and Priddle, H. D.: Anemia of Pregnancy Treated with Molybdenum-Iron Complex, Am. J. Obstet. & Gynec. 57:541-546 (Mar.) 1949.

WHITE LABORATORIES, INC., KENILWORTH, N. J.

^{*}Complete bibliography on request

They are safe to administer and effective in curtailing appetite; they lessen fatigue and produce a sense of well-being which enables the patient to carry on a weight reduction regime over a long period of time. If tolerance develops, administration may be stepped up or discontinued and resumed with adequate effect.

If no moral issues are involved in giving digitalis to the failing heart or a crutch to the temporarily lame, there should be none in giving a patient a relatively nontoxic drug to aid in health rehabilitation through reduction of weight. If physicians could grow hair on bald pates by administering pills, the answer would be obvious as to the necessity for prescribing them.

HARRY S. DOUGLAS, M.D. Washington, D. C.

▶ TO THE EDITORS: The necessity for appetite-reducing drugs as adjuncts to caloric restriction depends first on the necessity of caloric restriction itself. I have abandoned caloric restriction in treatment of the obese for it is accompanied by the phenomena of semistarvation—a decline in basal metabolic rate, hydration of the tissues, and frequent depressive episodes.

Evidence assembled during the past few years indicates that during treatment by caloric restriction, the obese do not "draw on" their reserve stores of fat sufficiently to supply the energy needs of the tissues, that obesity is, in fact, a metabolic disease in which an intrinsic aberration promotes and

maintains adipose deposits of excessive size.

The primary fault appears to be an impaired capacity of the tissues for oxidizing the pyruvic acid which is formed in the early stage of carbohydrate breakdown. The accumulated pyruvic acid inhibits the oxidation of fat and, in the presence of adequate thiamin, is itself converted to fat.

Treatment consists in restricting the chief source of pyruvic acid—carbohydrate. When this is done, the inhibition on oxidation of fat is removed, the weight becomes regulated to normal on an ad libitum intake of protein and fat, and the phenomena of semistarvation are avoided.

All this is made possible by means of the organism's mechanisms of homeostasis, for which there has been far too little respect in recent years. In obesity, the homeostatic mechanisms which normally balance appetite to energy expenditure are still intact, although the defect in oxidation of pyruvic acid causes the balance to become established at a higher level of body weight. Restriction of the source of excess pyruvic acid removes the inhibition on the oxidation of fat, allows the organism to receive a greater proportion of its energy needs from its own fat stores, and leaves the appetite to regulate the caloric intake needed to make up the rest of those needs.

Under these circumstances, appetite-suppressing drugs are obsolete.

A. W. PENNINGTON, M.D. Wilmington, Del.



Now - A coffee with dietary advantages

Coffee has not always been particularly kind to the digestion, and it can be a problem in the case of patients on certain special diets.

But today coffee in its most modern form — Borden's Instant Coffee — is better tolerated by delicate stomachs.

It's less likely to cause digestive upset and is suitable for many of those patients on special diets.

Why?

Because the coffee oils usually responsible for rancidity, off-flavor, and consequent digestive disturbance have been eliminated from Borden's Instant Coffee. In addition, it has a low sodium content,

no added carbohydrates, and it's low in calories.

The combining of these advantages with the rich full body and flavor of finest coffee is a result of Borden's special lowtemperature vacuum-drying process, more costly but more satisfactory than the commonly employed spray-drying method.

This process, which makes Borden's Instant Coffee so fine a product, was developed out of Borden's experience in dehydrating perishable foods — experience that has yielded such products as Starlac (non-fat dry milk), Bremil (powdered infant food), and Klim (powdered whole milk).

Manufacturers and distributors of BORDEN'S Instant Coffee
STARLAC non-fat dry milk • BORDEN'S Evaporated Milk • Fresh Milk • Ice Cream
Cheese • BREMIL powdered infant food • MULL-SOY hypoallergenic food
BIOLAC infant food • DRYCO infant food • KLIM powdered whole milk

The Borden Company
350 Madison Avenue, New York 17, N. Y.

▶ TO THE EDITORS: Appetite-suppressing drugs are undesirable in the treatment of obesity because they encourage magical expectations of an "easy way to reduce," contribute nothing toward learning new eating habits, and may interfere with determining the source of the excessive appetite.

Normal appetite is a complex psychophysiologic function that is remarkably accurate in adjusting food intake to energy output. The obese person is one who for years has taken in extra food for the satisfaction of needs other than energy—for pleasure, tension relief, or symbolization of affluence or affection. Logical treatment of this type of person requires weight reduction first, but more important, he needs help in changing the long-time pattern of excessive intake.

The patient knows in his heart that he eats too much, but eating fills some non-nutritional need and he does not want to give it up. He is desperately hoping he will be given some magic way of reducing the weight without giving up the pleasure. He will grasp tenaciously any suggestion that somehow he will be able to reduce and still eat. The magic pill encourages the hope, so carefully nurtured by the radio commercials, and in addition implies that the source of the appetite is chemical, like the pill, and therefore beyond his control.

Ideally, the period of weight reduction can be used as a time for training the patient in good nutritional habits that will be continued into the postreduction lifetime. Every day, therefore, that a patient simply relies on drugs for appetite reduction is a day lost as far as learning better food habits goes. Long range need for change in eating patterns tends to be ignored by the patient who has been given "the answer" in a small capsule.

Drug therapy fails completely to come to grips with the etiology of the condition. Why is the patient eating more than he needs? Unless this question is faced and answered one must expect a relapse as soon as drug therapy is discontinued. The patient whose appetite has been reduced artificially has no opportunity or motivation to study the influence of emotional pressures on his appetite. The physician should welcome failures of the "will power" as opportunities to show the patient more clearly the non-nutritional sources of his appetite.

Rational long-term therapy must include two essentials in addition to the immediate goals of weight reduction by dietary restrictions:

- Instruction in adequate normal nutrition with establishment of new healthful eating habits. A dietitian can handle this, or a physician may obtain teaching aids from the AMA and some commercial firms.
- Discovery and eradication of the causes of excessive appetite. This usually requires modification of the life pattern so that the patient obtains more appropriate, less harmful gratification of the nonmetabolic needs he has previously satisfied by eating.

The bored housewife or traveling salesman interrupts the dull routine with a snack whenever possible. Good cooks characteristically over-

SPECIFIC

FOR DIARRHEAL DERMATITIS



Stool enzymatic action on the skin is a concept heretofore overlooked in treatment of "sore bottom" in the newborn and excoriated buttocks due to diarrhea or loose stools resulting from oral antibiotic therapy.

Diaparene Peri-Anal Creme is anti-enzymatic, anti-bacterial and water-repellent.

CONTAINS: Di-isobutyl cresoxy ethoxy ethyl di-methyl benzyl ammonium chloride monahydrate, zinc oxide, starch, cod liver oil and casein in a water-repellent base.

SUPPLIED: One ounce tubes and one pound jars

FOR SKIN IRRITATIONS DUE TO URINE

Diaparene ointment

The water-miscible antibacterial of choice to inhibit formation of urinary ammonia in the excoriated incontinent (infant or adult).





PHARMACEUTICAL DIVISION, HOMEMAKERS' PRODUCTS CORPORATION, 380 SECOND AVENUE, NEW YORK 10, N. Y.—TORONTO 10, CANADA

do their necessary tasting. The ample table may be the symbol of success in a previously needy family. Many obese persons eat when tense or upset, having discovered the sedative effect of the full belly. The most difficult patients are those for whom eating may be the only pleasure in a frustrated, empty life or who use food as a substitute for or symbol of love and affection. Such patients are often so clearly unhappy and neurotic that referral to a psychiatrist may be indicated.

SPENCER BAYLES, M.D.

Kansas City, Kan.

To the etiology of obesity falls into 3 categories which, in the order of their frequency, are [1] habitual overeating secondary to cultural or family patterns in which an abundance of food on the table is emphasized, [2] overeating secondary to a deepseated personality disturbance, and [3] obesity secondary to endocrine disturbance. Anorexogenic drugs succeed only in the first group.

The administration of amphetamines in the second group is definitely contraindicated. Here, overeating represents an important defense mechanism which at times allows the individual to function just this side of psychosis. Very often, cycles of overeating correspond to cycles of depression. Fear of sex or often an unrecognized hunger for sex or affection may hide behind excessive eating.

An incipient schizophrenic personality change may be masked by a similar process. Any forceful in-

terference on the part of the physician by insisting on drugs or diet without the necessary emotional support may usher in a severe emotional disturbance. Fortunately for both physicians and patients, this type of individual senses the inherent danger of deprivation of food and simply refuses to adhere to the advice received. These patients seldom make an appearance in the statistical evaluation of the various anti-obesity measures because they do not return to the physician after the first two or three visits. If one insists on treating these patients by physicochemical means rather than by psychotherapy, the administration of such bulk-producing agents as hemicellulose and plantago derivatives is indicated. These agents do not interfere with the overwhelming need for oral activity and also create a sensation of fullness in the epigastric region. An empty feeling in this area often gives rise to a state of anxiety.

Obesity secondary to endocrine disease fails to respond to dietary or pharmaceutical measures unless treated etiologically.

A. D. JONAS, M.D.

New York City

▶ TO THE EDITORS: Suppression of appetite by drugs, although helpful in certain cases, is not necessary in the treatment of obesity. When the weight excess has developed gradually, combination of a reducing diet with appetite-suppressing drugs is advisable. The subjective treatment goal in such cases usually co-

(Continued on page 138)

THE ORIGINAL ENTERIC-COATED TABLET

provides
EFFECTIVE
WELL-TOLERATED
PROLONGED

VASO-DILATION



REPEATEDLY SHOWN and proven by objective tests on human subjects¹—this is one of the most effective of all the commonly known Xanthine derivatives. Because of the enteric coating it may be used with marked freedom from the gastric distress characteristic of ordinary Xanthine therapy. Thus THESODATE, with its reasonable prescription price also, enjoys a greater patient acceptability.

OF THEOBROMINE SODIUM ACETATE

Available: In bottles of 100, 500, 1000.
TABLETS THESODATE

*(7½ gr.) 0.5 Gm. *(3¾ gr.) 0.25 Gm.

THESODATE WITH PHENOBARBITAL

*(7½ gr.) 0.5 Gm. with (½ gr.) 30 mg. (7½ gr.) 0.5 Gm. with (¼ gr.) 15 mg.

*(3% gr.) 0.25 Gm. with (1/4 gr.) 15 mg.

THESODATE WITH POTASSIUM IODIDE (5 gr.) 0.3 Gm. with (2 gr.) 0.12 Gm.

THESODATE, POTASSIUM IODIDE WITH PHENOBARBITAL

(5 gr.) 0.3 Gm., (2 gr.) 0.12 Gm. with (1/4 gr.) 15 mg.

*In capsule form also, bottles of 25 and 100.

- Riseman, J. E. F. and Brown, M. G. Arch. Int. Med. 60: 100, 1937
 Brown, M. G. and Riseman, J. E. F. JAMA 109: 256, 1937.
- 3. Riseman, J. E. F. N. E. J. Med. 229: 670, 1943.

For samples just send your Rx blank marked-10TH 10

Brewers EST. 1852

BREWER & COMPANY, INC. WORCESTER B, MASSACHUSETTS U.S.A.

CORONARY

ARTERY

DISEASE

central nervous pacifier"...



A. H. ROBINS CO., INC. - RICHMOND 20, VA.

Ethical Pharmaceuticals of Merit since 1878



In Mephate 'Robins', the clinical usefulness of mephenesin per os has been significantly heightened by the inclusion of glutamic acid hydrochloride, which improves absorption and enhances effectiveness for many patients otherwise unresponsive.* Provides a relaxant effect on skeletal muscle spasm; an ameliorating effect on tremor; and a relief of anxiety without dimming consciousness. Particularly helpful in abnormal neuro-muscular conditions such as rheumatic disorders, disc syndromes and cerebral palsy; alcoholism, anxiety tension states and psychiatric states.

In each Mephate Capsule, 0.25 Gm. mephenesin—with 0.30 Gm. glutamic acid hydrochloride.

Adult dosage starts at 2 capsules 3 or 4 times a day, preferably with food or liquids.

Smith, R. T.: JL.-Lancet 71:271 (July), 1951, incides with the objective goal, namely, that of reducing weight to a previous, more comfortable level.

The task is to reeducate such people to give up faulty eating habits and develop new ones appropriate for their present metabolic requirements. There is danger, however, that no true reeducation of eating habits will take place and that excessive eating will be resumed as soon as the drug is discontinued. Under such circumstances the weight loss will be only temporary.

Drug treatment is contraindicated in patients in whom obesity has developed on the basis of neurotic problems and compulsive eating. In such patients, amphetamine may have an irritating and overstimulating effect. The underlying emotional problems may become more apparent because the abnormal eating habits play an important role in the precarious emotional

equilibrium.

The subjective treatment goal in such cases may be quite unrealistic. The patient may expect fulfillment of impossible daydreams from the loss of weight. Such patients may follow the prescribed regime with exaggerated exactness, lose enormous amounts for a short period. and then regain just as rapidly. Since the drug is supposed to help in losing weight more rapidly, such people may develop a true addiction, take excessively large doses, or develop the delusion that without the drug they not only cannot curb the appetite but can't function at all.

Severe obesity and excessive eat-

ing during childhood and adolescence are so commonly the expression of an emotional maladjustment that drug treatment in such patients is contraindicated.

HILDE BRUCH, M.D.

New York City

▶ TO THE EDITORS: Less than half of patients on reducing diets must have some type of sympathomimetic amine as a "crutch" for their appetite. The majority of these patients are the neurotic obese.

In order to make adherence to a low-calorie diet easier, practically all patients must be given something to inhibit the anhedonic desire to "nibble," thereby decreasing

the excessive appetite.

Much has been written about the small percentage of side effects found in patients who are taking stimulating doses of drugs. It has been my experience with over 8,000 patients who were on reducing diets that over 22% complained of insomnia; 14%, weakness; 18%, headaches; 29%, palpitation; and 48%, dryness of the mouth. Amphetamine phosphate and other drugs should be combined with a barbiturate in order to lessen undesirable side effects. The choice among these drugs is the monobasic amphetamine phosphate.

In patients who are not neurotic, a placebo during the day with ½ gr. of phenobarbital at night has given very good results and produced a consistent reduction of 2 lb. or more a week. If amphetamine is the choice of the physician,

(Continued on page 142)

proven

pain

control

with safety

'EMPIRIN'

with Codeine Phosphate

NEWS CONCERNING NEW Lysol

To LYSOL—an accepted standard among disinfectants for 50 years—something new has been added...and something old has been taken away.

ADDED:

New safety in use; a fresh clean odor; and new authoritative evidence of rapid and remarkably prolonged bactericidal and fungicidal activity, even in the presence of organic matter. Effective against all the common pathogens, including those which frequently resist the action of the mercurials or quaternary ammonium compounds (e.g., M. tuberculosis, Trichophyton interdigitale).

Would you like further information on the new Lyson's particular usefulness in the office, clinic, hospital, or home—or a trial supply for general sanitation, instrument disinfection, surgical and obstetrical preparation, treatment of dermatomycoses, wounds and abrasions, vaginal hygiene, or its many other uses? A note on your prescription blank or professional letterhead will be promptly acknowledged. Address the Professional Products Division, Lehn and Fink Products Corp., 445 Park Ave., New York 22.



now a truly "all-purpose" disinfectant

REMOVED:

The "poison" label . . . New Lysol is non-toxic, non-caustic, non-corrosive. Acute toxicity (LD $_{50}$) is 10 cc/kg., equivalent to 23 fluidounces of the concentrated solution for an average adult man; subacute (cumulative) toxicity, percutaneous toxicity, dermal and mucosal irritant action are similarly negligible or absent.

The new and improved Lysol formula primarily involves a reduction in cresylic acid content and an increase in the amount of orthohydroxydiphenyl to retain a phenol coefficient of 5.



he will find the racemic type is more effective than either the levo or dextro preparations. Each of them produces similar side reactions.

Sleep is very important to people who work all day and a barbiturate should be prescribed to give them needed rest and relaxation.

Physicians must give a diet to the patient which will be commensurate with the activity of the individual. The foods should be appealing.

Radio and television programs are selling everything from seaweeds to fruit drinks for weight reduction. They probably sell these nostrums to 100 times more people than physicians ever treat. Unless your diet has "appeal" and the drugs you use are efficient and harmless, the people will fall prey to the quacks.

S. WILLIAM KALB, M.D.

Newark

Natural Childbirth?*

QUESTION: Is "natural child-birth" a desirable method of delivery?

Comment invited from F. W. GOODRICH, JR., M.D. LAURENCE G. ROTH, M.D.

► TO THE EDITORS: Natural childbirth is basically a system of intellectual, emotional, and physical preparation for childbirth to the end that mothers may enjoy a healthier and happier pregnancy and delivery. That these aims are difficult, if not impossible, to evaluate objectively is admitted, but *Modern Medicine, June 1, 1953, p. 95. does this mean that attempts to reach these goals are useless or that we must deny clinical judgment because it cannot be proved or disproved in the laboratory?

The experience of those who have made a genuine attempt to apply the technics of natural child-birth seems to prove otherwise, since their numbers increase every year. More and more hospitals are adding prenatal classes to their maternity care programs, more and more frequently the subject is appearing on medical programs, and recently the New York City Department of Health recommended that hospitals with prenatal clinics organize classes for parents.

The article by Drs. Arthur J. Mandy, Theodore E. Mandy, Robert Farkas, and Ernest Scher epitomizes the objections of the antagonists of this philosophy. Recognizing Read's basic concept that "fear of childbirth increases the patient's tension state and thereby produces pain in labor," the authors go on to attack the means of combating and overcoming this fear. These means are described as "diet, education, exercise, and relaxation." Let us see how this theme is developed.

Since no American investigator has ever stated that diet plays a role in influencing anxiety in labor, this can be dismissed in as many words. The authors then state that "education is of value only in the desensitization of some of the common taboos surrounding pregnancy and the childbirth process. Those who have attempted too intensive a program of education in anatomy

(Continued on page 146)

DYSMENORRHEA

Estrogen and androgen go together
like "compass and pen"
to provide a dual approach
for maximum efficiency
in dysmenorrhea.
Many clinicians feel
that these two steroids,
together, as combined in
"Premarin" with Methyltestosterone,
are more effective
than either one alone
in producing relief of pain
by suppressing ovulation.
Excellent results have been reported
from such therapy.

"PREMARIN" with METHYLTESTOSTERONE

for combined estrogen-androgen therapy



Ayerst, McKenna & Harrison Limited • New York, N.Y. • Montreal, Canada

With Nitranitol

hypertensives can return to a more normal life



The Wm. S. Merrell Company . . . Pioneer in Medicine

... sooner

Restricted activity and frequent laboratory checkups are often a concern to the patient. You can return many hypertensives to a more normal life with Nitranitol. Because of its low toxicity, blood pressure is safely lowered—side effects are the exception rather than the expected. Nitranitol acts directly on the arterioles to produce gradual vasodilation. It maintains lowered pressures for prolonged periods.

Why not start your hypertensive patients on Nitranitol—the universally prescribed drug for essential hypertension?



This chart shows the blood pressure response you can produce for your hypertensive patients.

Nitranitol[®]

Merrell's safe, gradual, prolonged-acting vasodilator



Because of its direct action on the arterioles, Nitranitol provides SAFE, GRADUAL, PRO-LONGED vasodilation, in 5 dosage forms.

Nitranitol

Mannitol hexanitrate 32 mg. Vasodilation plus sedation:

Nitranitol

with Phenobarbital
Mannitol hexanitrate 32 mg.
Phenobarbital.....16 mg.

Protection in capillary fragility:

Nitranitol

with Phenobarbital and Rutin*

with Rutin 20 mg. When threat of cardiac failure exists:

Nitranitol

with Phenobarbital and Theophylline*

with Theophylline . . 100 mg.

For refractory cases of hypertension: Nitranitol P. V.*

with Alkavervir.....1 mg. (A special alkaloidal fraction of Veratrum viride, biologically standardized for hypotensive activity.)

*Each contains Nitranitol 32 mg, and Phenobarbital 16 mg.

DOSAGE: In blood pressures over 200 systolic, 2 tablets 4 times daily. In other cases, 1 or 2 tablets every 4 to 6 hours.

NOTE: Nitranitol is exceptionally stable, assuring potency, so important in hypertensive medication.

Trademark 'Nitranitol P. V.'

for 125 Years.

New York
CINCINNATI
St. Thomas, Ontario

Merrell SINCE 1828 and physiology are aware that such a procedure can arouse as much anxiety as it allays." Herein lies the necessity for skillful education. Simply because some patients react with anxiety to unskillful education we do not conclude that such education is universally undesirable.

That there is an increasing interest on the part of our patients in learning more about anatomy and physiology is attested by the increasing numbers of articles on these subjects in the popular press. I believe that the day is past when we could expect blind obedience

from our patients.

The exercises are described by the authors as "not only a nuisance . . . but . . . impossible to evaluate objectively." Such timehonored and proved technics of prenatal care as vitamin-mineral supplements and adherence to prescribed diets are undoubtedly a nuisance, but are they discarded on that basis? Many patients obviously do not follow their obstetrician's advice, but do we discontinue giving advice because a few do not cooperate? Can we evaluate objectively all the routines we now utilize in modern prenatal care? I have seen the pelvic rocking exercise relieve the postural backache of pregnancy in over 90% of patients, and I am not inclined to discard its use simply because objective evaluation is lacking.

The authors attack the relaxation technics which "form the cornerstone of every natural childbirth program." This attack takes the familiar form that these technics are to be condemned because they

induce hypnosis. They quote Pascal to the effect that "simple relaxation seems to be sufficiently far along on the hypnotic continuum to facilitate recall and to increase the suggestibility of the patient." With this I am in complete agreement. However, if we can significantly decrease the pain a patient may feel by having her practice relaxation during pregnancy and by reinforcing this practice very simply in labor, I would conclude that this is a highly desirable thing to do.

Although deep hypnosis will accomplish the same thing, its use has several disadvantages. First, the stigma described by the authors is a very real factor. Second, the time required with each patient prenatally is much greater than most doctors have available; and third, less than 50% of the population at large are capable of being deeply hypnotized. Some physicians have abandoned hypnosis in favor of natural childbirth technics because of the latter's relative advantages.

One of the simplest and most effective of the relaxation technics employed is diaphragmatic or "abdominal" breathing. I believe that well over 90% of patients experience distinct relief in the first stage of labor from its use. I am convinced that this technic will significantly decrease the amount of drugs necessary.

Fear of childbirth is all too common in pregnancy and has considerable effect on labor and delivery. We can hardly expect, as obstetricians, to correct basic personality defects by our treatment in pregnancy, but there is no reason why



For convenience of the physician...for convenience of the patient...four powerful antibacterial agents are now combined in this one Lederle tablet.

The additive effect of these drugs makes Aureomycin Triple Sulfas Tablets outstanding for use against gonococcal infections and against dysentery caused by Shigellae.

For the treatment of bacillary dysentery, this product should be administered on the basis of its aureomycin content at a dosage of 12.5 to 20 mg. per kilo of body weight. The average daily adult dose is 2 tablets 4 times daily, which provides 1 Gm. of aureomycin and 4 Gm. of sulfonamides. Children should receive proportionately less.

For the treatment of Gonorrhea, the recommended dose is 2 tablets initially followed by one tablet at 6-hour intervals for 2 doses. This course may be repeated if necessary.

BOTTLES OF 12, 100 AND 1,000.

Each tablet contains:

AUREOMYCIN HCI	125 mg.
	-
SULFADIAZINE	167 mg.
SULFAMERAZINE	167 mg.
SULFAMETHAZINE	167 mg.



LEDERLE LABORATORIES DIVISION AMERICAN Cyanamid COMPANY
30 Rockefeller Plaza, New York 20, N. Y.

we should not do what we can to mitigate such anxiety. In fact, I believe that we are being derelict in our duty to the patient when we simply treat her pregnancy and do not treat her as a patient who is pregnant.

A common misconception is that the patient must be conscious at delivery if natural childbirth is to be "successful." This misconception arises, no doubt, not only from the writing of Grantly Dick Read, but also from the publications from Dr. Thoms's Clinic at New Haven. in which consciousness at delivery was simply used to illustrate the minimal amounts of analgesia and anesthesia which most patients require. It has been my experience that with natural childbirth training, 50 to 85% of patients do not need deep anesthesia although this is not primarily an aim of the program.

The concept of success or failure in natural childbirth is artificial and, unless patients are reassured, can give rise unnecessarily to guilt feelings in those patients who for one reason or another cannot be awake at delivery. There should be no prestige attached to conscious

delivery.

In their first conclusion to the article the authors reiterate another common misconception, that arising from the designation given to this philosophy. While I agree that the term natural childbirth is unfortunate in its connotations, usage seems to indicate that it will continue to be accepted. Certainly any attempts to substitute such terms as physiologic childbirth or other euphemisms have been unsuccessful. However, to condemn the entire system because of a semantic disagreement over designation seems unnecessary and misleading. Calling the relaxation technics "hypnosis" is another example

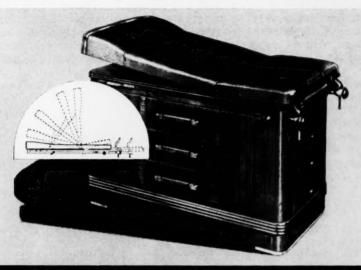
of semantic quibbling.

Traditionally, prenatal care has been one-sided in its emphasis on the physical. Natural childbirth is a philosophy of total preparation in which the mother is intellectually and emotionally prepared as well. Prepared mothers are more comfortable during pregnancy, labor, and delivery and enjoy the experience to a greater degree than those not exposed to such preparation. As a consequence of this training more mothers need less help from drugs and anesthetics than before. Certain psychologic advantages attend when any great experience such as childbirth is made more pleasant and satisfying.

Training for natural childbirth need not be "complex" or "ritualistic." In clinic practice, group meetings are the obvious way to teach. In private practice, many of us have found that having the patients read books and pamphlets and reinforcing the reading with personal instruction at office visits are simple enough to be both practical and to meet the needs of most patients. In some communities private patients can be sent to classes taught by nurses or sponsored by maternity health organizations.

In any community the hospital can and should be the place where parent education is centered. Classes incorporating such visual aids as

Thirty reasons why most doctors buy Hamilton



Removable treatment basin concealed in pullout leg rest (optional). Disappearing stirrups are adjustable, locked securely by handwheel.

Hidden Hide-A-Roll provides clean STER-O-SHEET cover for each patient.







Into this fully adjustable chair-table Hamilton builds thirty features, for convenience and efficiency unmatched by any other examining room equipment! Wider, longer top with built-in head rest—linoleum covered pull-out step—partitioned treatment insert with cotton dispenser and bottle rack... everything conceivable to make examinations swifter, easier! Shown here is the Nu-Tone table (in rich Walnut or Blonde Mahogany). Nu-Trend and Steeltone tables are equally handsome. All are available with matching instrument and treatment cabinets, waste receivers and stools for complete suites. But see them at your Hamilton dealer's—see all the exclusive features that make Hamilton most wanted by most doctors.

Hamilton Manufacturing Company

TWO RIVERS, WISCONSIN

movies are of obvious value to the patient and a source of good public relations for the hospital. They serve the further function of bringing the nursing department into the program. Without nursing participation any natural childbirth program is far from complete since reinforcement of the training during labor is essential. This reinforcement comes in large part from the obstetric nurses.

Thoms and Wyatt have stated that no doctor who has ever given this approach a trial has been willing to abandon it. As far as I am aware, this statement is still true, and even Dr. Mandy and his associates do not indicate that they intend to discontinue the program which they are apparently conducting. We must thus assume that this approach has some value not found in the usual prenatal care routines or that a large number of patients and doctors are misguided.

F. W. GOODRICH, JR., M.D. New London, Conn.

▶ TO THE EDITORS: If natural childbirth is ever to have a general understanding in this country, we must confine our consideration to facts. Since the unfortunate term, "natural," has become fixed in our language, perhaps we might better coin a new term such as "Read birth" to emphasize the great difference which exists between Read with his theories and passions and what we have developed in this country in physiologic childbirth.

We are pleased to acknowledge the real contributions which Read has made to our appreciation of certain aspects of the reproductive physiology. However, in this country, we have applied these principles to our previous knowledge and have not made a wholesale substitution of his ideas for all our methods and principles.

The essential part of our program is individualization of patient care. When possible, appropriate training helps prepare the patient for the experience of childbirth. The need for and the benefits derived from such training vary with each individual. Individual support in labor utilizes the arts and sciences of obstetrics to attain the goal of a physiologic-nonpathologic-birth of a normal, living infant. Relaxation technics are used because of the benefits to the patient. The individual needs for analgesia and anesthesia are satisfied according to the judgment of the physician-obstetrician. In short, this is modern, scientific obstetrics that is based on facts and adapted to each individual patient.

An obsession with emotions, neuroses, and psychology has developed around "Read birth" which parallels the recent discovery of psychiatry by the masses in this country. Psychiatry is not a science, but a knowledge blended from theory, observation, description, personal opinion, and the modifying effects of superstition, tradition, and history. Without standards of measurement, judgment of psychiatric comments is difficult, but the mere mass of comment should not be mistaken for the weightiest aspect of the subject of childbirth.



specifically indicated in biliary constipation

Constipation is usually associated with biliary stasis and impaired digestion. Tablets of Caroid and Bile Salts with Phenolphthalein offer 3-way help in the reestablishment of normal function in these cases.

CHOLERETIC ACTION

 Stimulating bile flow for easier fat digestion

DIGESTANT ACTION

 The enzyme, "Caroid," promotes protein digestion

LAXATIVE ACTION

• With minimal laxative dosage

Supplied: bottles of 20, 50, 100, 500, and 1,000.

Write for a trial supply today!

American Ferment Co., Inc.

1450 Broadway, New York 18, N. Y.

Caroid® and Bile Salts

specifically indicated

in biliary dyspepsia and constipation

I do not believe that the benefits of our program are primarily psychologic. Such a claim is a narrow opinion which ignores the importance of the whole for a part of the subject. I happen to share the opinion that there are incidental psychologic benefits, but I have the same belief in the importance of good medical care for all conditions encountered in medical practice.

I am primarily concerned with the safe delivery of both mother and child, a parturition that is truly physiologic. The principles of our physiologic childbirth program help us to realize this goal of maternal and infant welfare. This concrete value of the health of the mother and child is our first concern. Beyond these facts, I am naive enough to guess that attainment of our goal will satisfy the potential problems envisioned by those who are more enthusiastic about psychiatry and psychology.

LAURENCE G. ROTH, M.D. Chelsea, Mass.

Indications for Sterilization of Women*

QUESTION: What are the reasons for sterilization of women?

Comment invited from HARRY A. PEARSE, M.D. HAROLD A. OTT, M.D. T. L. FISHER, M.D.

TO THE EDITORS: In the purely medical aspects, therapeutic abortion and sterilization present no unusual problems. So considered, the only requirement is that the treat*MODERN MEDICINE, May 1, 1953, p. 98.

ment be proper for the disease involved. However, as Dr. James F. Donnelly and Frank R. Lock have indicated, the problem ceases to be simple when the social, moral, and legal aspects are included.

There appears to be no fundamental disagreement that these operations may be performed on the grounds of medical necessity, even though what does constitute such grounds may be divergently interpreted.

There are no definite, unvarying criteria which may be applied to the proper performance of these procedures. While we admit and believe that standards of justifiability must be established, our present concern is only with the mechanism whereby control over therapeutic abortion and sterilization within the hospital may be attained.

Because the hospital as an institution and the professional staff as an organization assume obligations to the patients, we believe that requiring the approval of a committee of physicians is a justifiable and desirable means of controlling the performance of therapeutic abortions and sterilizations.

A thoughtfully appointed committee with members who remain anonymous is in a position to examine each case in terms of fundamental necessity and to present a totally unhampered opinion with complete medical honesty. Aided by the hospital's legal adviser the committee can be familiar with the abstruse provisions of existing statutes, thereby offering protection against legal liability.

(Continued on page 156)



WHENEVER a worried mother asks you how to "make" her baby eat more, you can help her understand that a baby gets full benefit from his food when he enjoys it.

No baby can be expected to thrive nutritionally and emotionally if mealtimes are marred by coaxing and condict.

It is fortunate for your young patients that Beech-Nut Foods combine fine nutritive values with appealing flavor. Now, with more varieties to choose from than ever before, Beech-Nut makes it easier for mothers to please your young patients and keep mealtimes happy!

A wide variety for you to recommend: Meat and Vegetable Soups, Vegetables, Fruits, Desserts—Cooked Cereal Food, Cooked Oatmeal, Cooked Barley and Cooked Corn Cereal.

Babies love them...thrive on them!

Beech-Nut



Every Beech-Nut Baby Food has been accepted by the Council on Foods and Nutrition of the American Medical Association and so has every statement in every Beech-Nut Baby Food advertisement.

CHEMOTHERAPEUTIC MOLECULE RED SPECIFICALLY FOR RINARY TRACT INFECTIONS



Discovery of the antimicrobial properties of the nitrofurans provided a novel class of chemotherapeutic agents. These compounds possess specific antibacterial activity with low toxicity for human tissues.

The simplicity and flexibility of this nitrofuran nucleus make possible numerous variations of its

chemical and therapeutic OIN characteristics; a remedy may be tailored to fit the disease.

Within recent years we have so designed two important antimicrobial nitrofurans for topical use: Furacin brand of nitrofura-O2N zone and Furaspor

furyl methyl ether. Now we have succeeded in chemically tailoring a unique molecule, designed specifically for the treatment

of bacterial urinary tract infections:



RADA

brand of nitrofur-

Brand of nitrofurantoin: N-(5-nitro-2-furfurylidene)-1-aminohydantoin.

Products of Eaton Research

for

pyelonephritis cystitis pyelitis

which have proven refractory to other antibacterial agents:

FURADANTIN

provides definite advantages:

clinical effectiveness against most of the bacteria of urinary tract infections, including many strains of Proteus, Aerobacter and Pseudomonas species

low blood level—bactericidal urinary concentration effective in blood, pus and urine—independent of pH limited development of bacterial resistance rapid sterilization of the urine stable

oral administration

low incidence of nausea-no abdominal pain-no proctitis or pruritus-no crystalluria or hematuria non-irritating-no cytotoxicity-no inhibition of phagocytosis

tailored specifically for urologic use



Scored tablets of 50 & 100 mg. Now available on prescription Write for comprehensive literature



When composed of qualified specialists, the committee will possess detailed knowledge of the proper management of the various complications which arise during the reproductive years, thereby assuring conformance to the best in contemporary medical practice. With the realization of the importance of its decisions the committee will conduct deliberations on a high, ethical plane, thereby avoiding the imputation of immorality to the procedure approved. Thus the attending physician can be certain that any abortion or sterilization which he may do with the committee's approval will be legally defensible, medically indicated, and morally acceptable.

HARRY A. PEARSE, M.D. HAROLD A. OTT. M.D.

Detroit

► TO THE EDITORS: Speaking legally, preservation of health or life is the only reason for sterilization. A few state and provincial laws specify other reasons.

Under British law, it is deemed in the best interests of individual and state if procreative powers are retained as long as they naturally persist. An individual is not free to maim himself. Doctors should feel no more justified in removing ovaries or tubes simply because a patient wishes them removed than they would in removing a hand or foot for the same reason. In either case a doctor may deny himself the protection of the Medical Act and expose himself to charges of common assault.

In deciding whether a procedure is essential for preservation of health or life, a doctor should be guided wholly by medical indications. Economic, social, and, generally speaking, eugenic reasons are not valid. Furthermore, to protect against future claims, the medical necessity of any sterilization procedure should be clearly demonstrable to the lay individual.

When a decision is made that a surgical procedure is necessary, consultant opinion might well be sought. If, after examination of the patient, the consultant agrees, have his opinion put in writing. It is a wise precaution to inform the patient that sterilization will result.

By inference, it is obvious that voluntary sterilization, when medically unnecessary, is illegal, and no special permission from patient and spouse can legalize it.

T. L. FISHER, M.D.

Ottawa



"Would you mind going over my diary, Doctor? It contains all my symptoms for the past five years!"





Desiccate those unsightly, possibly dangerous, skin growths with the ever-ready, quick and simple-to-use Hyfrecator. 90,000 instruments in daily use.

Please send me your new four-color brochure step-by-step technics for the removal of super growths.	
	Doctor
THE BU	Address Addres

THE BIRTCHER CORPORATION, Dept. MM 10-15
4371 VALLEY BOULEVARD LOS ANGELES 32, CALIFORNIA



the Birtcher

Vibra-Bath

... a most advanced hydrotherapy apparatus, which utilizes a new principle of hydromassage to introduce techniques not possible with conventional equipment.

The thermal and massage stimulus of this constantly agitated water is perhaps the most useful form of hydrotherapy in the after-care of amputation stumps, polio and in orthopedic cases.



The Vibra-Bath quickly promotes circulation through the hydropercussion of thousands of warm air bubbles impinging upon every square inch of the area uncor treatment. It is well adapted to the treatment of sprains and injuries common to the athletic field.



In addition to the excellence of its hydromassage, the Vibra-Bath has the important advantages of light weight and easy portability. Write for illustrated brochure and HANDBOOK ON HYDROMASSAGE.



The BIRTCHER CORPORATION

4371 Valley Boulevard Los Angeles 32, California
Please send me your new brochure on the Vibra-Bath and the
HANDBOOK ON HYDROMASSAGE.

Name Dept. MM 10-15
Address State State

Posttonsillectomy Hemorrhage*

▶ TO THE EDITORS: As a humble worker in the vineyard I was greatly interested in the article by Dr. Ernest B. Emerson, Jr., on posttonsillectomy hemorrhage and the Medical Forum discussion on the subject (Modern Medicine, Apr. 1, 1953, p. 135).

Not only many of the laity but, too often, young physicians fresh from an ordinary internship regard tonsillectomy as a very minor affair to be performed with impunity by any young physician armed with a mouth gag, scalpel, and tonsil snare.

I do not regard any surgery which can be followed by death from hemorrhage or other complication as a minor affair, but as an often difficult surgical procedure which should be approached with the utmost respect. No physician should attempt a tonsillectomy without proper equipment and the knowledge and experience to employ this equipment efficiently.

While I have not kept an accurate record of the number of tonsillectomies I have performed since 1921 using the suction tonsillectomy technic exclusively, I am confident the number will run to at least 5,000 or more without a single serious hemorrhage during operation or postoperatively.

To be sure, I have had a few minor bleedings at time of operation, and also a few secondary bleedings that were more of a nuisance than anything else. The great majority of these were in the early days of my suction tonsillectomy work when the operation seemed so practically bloodless in the vast majority of cases that I was a little careless in making a careful post-operative examination of each fossa for oozing points. Since I haveroutinely checked each and every fossa for dryness before removal of the patient from the operating table, operative oozing has been practically nil; any secondary difficulty has been rare.

So I can say that suction tonsillectomy in my hands has given me a clean, rapid, practically bloodless, in-capsule enucleation on all types of tonsils under local and general anesthesia. Convalescence in the vast majority of cases was uneventful and shortened by half as compared with routine "snare and dissection."

I employ a special air pump hookup which delivers two separate lines of suction plus an ether-vapor line for delivery of ether vapor via a hook dropped into the corner of the mouth when the mouth gag is in position and mouth held open; all are footswitch-controlled by the operator, and these several operative lines are suspended alongside the operating table ready for instant use. For example, if any blood, mucus, or vomitus should be present at any time, the aspiration tip is simply dropped into the pharynx, the footswitch is touched, and the operative field is instantly cleared.

In other words, with a Jennings type of mouth gag in position, the operator works under direct vision in a clear, bloodless field and the suction tube is placed in position

^{*}MODERN MEDICINE, Dec. 1, 1952, p. 99.

NEW SPECIALLY CONSTRUCTED TABLET
RELEASES HYDROCHLORIC ACID
GRADUALLY INTO STOMACH AT A RATE
MORE CLOSELY PARALLELING NORMAL.

BETTER TOLERATED-MORE EFFECTIVE.

ORMACID TABLETS (Stuart)



ADVANTAGES:

- Specially constructed tablet releases hydrochloric acid in the stomach at a more normal rate. Eliminates disadvantages of the sudden release of HCI.
- Permits larger dosage in one tablet; each tablet provides equivalent of 15 minims dilute HCl acid.
- 3 Better tolerated more effective.

EACH TABLET CONTAINS:

440 mg. Betaine Hydrochloride 32.4 mg. Pepsin 110 mg. Methylcellulose (controls release of HCI)

BOTTLES OF 100 ... available at all pharmacies

Stuart

THE STUART COMPANY . PASADENA I. CALIFORNIA

If you've been looking for better results in Obesity Control...

Stuart Amvicel



TO PATIENTS
APPROXIMATELY
4¢ PER CAPSULE

One small capsule contains:

5 mg. dextro amphetamine sulphate, inhibits appetite, and produces a feeling of well being.

¼ gr. phenobarbital, offsets nervous stimulation.
200 mg. methylcellulose, supplies needed bulk.

9 vitamins* supply protective amounts
8 minerals* of nutritional factors

*Vitamins: A, 1700 USP units; D, 170 USP units; C, 25 mg.; B₁, 1 mg.; B₂, 1 mg.; Niacin Amide, 10 mg.; B₆, 0.15 mg.; B₁₂, 1 mg.; Calcium Pantothenate, 1.5 mg. Minerals: Calcium, 40 mg.; Phosphorus, 30 mg.; Iron, 3 mg.; Copper, 0.25 mg.; Iodine, 0.05 mg.; Cobalt, 0.167 mg.; Manganese, 0.33 mg.; Zinc, 0.1 mg.

Available at all Pharmacies



with precision. The tonsil is lifted out of the fossa into the bulbous tube mouth (see illustration). The tonsil snare loop is carried over the end of the tube, tightened down with the ratchet at whatever rate the operator prefers, and the tonsil removed cleanly, rapidly, in cap-



sule, and with practically no blood loss except for minor oozing from the denuded area for a minute or two. A heavy No. 9 snare wire is employed which pinches through the small capillaries going into the tonsil and seals them by compression; this is mainly responsible for the dry nature of the enucleation.

Actual tonsil removal takes from ten to twenty seconds; rapidity of operation makes for a lighter and briefer anesthesia. After the actual enucleation, cotton tampons on

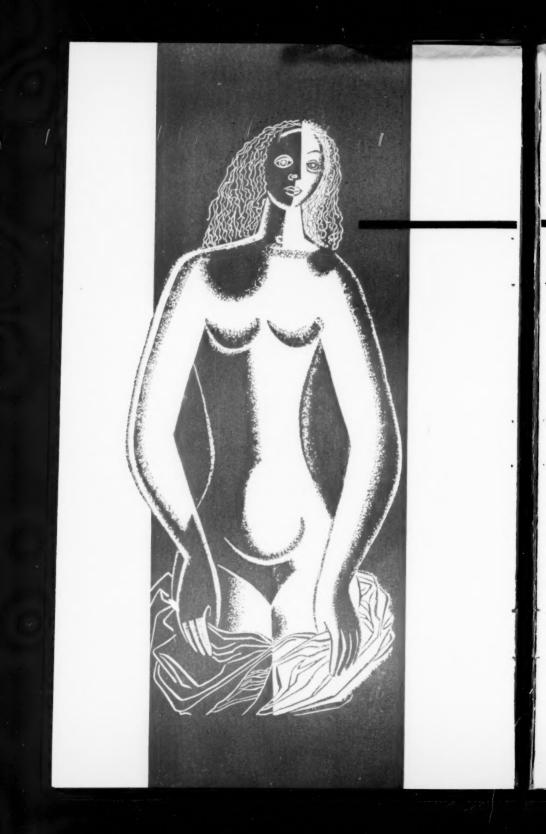
sponge forceps are placed in the fossa under pressure one after the other; usually after a minute or two the fossa is dry. At times the tampon may be dipped into tincture of geranium, which gives a sort of hemostatic varnish effect to the empty fossa. Any oozing point is picked up with a modification of the Robertson hemostat, which I have had made, and compressed for a few seconds. Rarely, a small spurter may be noticed as the tonsil is enucleated, but usually this clots before a hemostat can be picked up. When the first fossa is dry, the second tonsil is similarly enucleated and the second fossa also checked for dryness.

A tonsilloscope makes a searching examination of the fossae very easy. At times, a catgut suture may be employed or the pillars may be sutured over a tampon of medicated gauze, Gelfoam, or similar material and left in position for a suitable period.

While my equipment includes several automatic suturing forceps, ligature carriers, and so on, I have not as yet used them.

In secondary bleeding any clots are removed and pressure is exhibited with tampon on sponge forceps; usually this suffices to control the oozing but, if necessary, suturing of pillars over a Gelfoam sponge is adequate. Acetylsalicylic acid is not given postoperatively as the consensus is that this tends to interfere with normal blood clotting. I have not found vitamin K dosage necessary.

J. B. H. WARING, M.D. Wilmington, Ohio



New orally effective agent

for functional uterine bleeding

Blutene

TRADE MARK REG.

CHLORIDE-SULFATE

(TOLONIUM CHLORIDE-SULFATE, ABBOTT)

With the introduction of Blutene, a long-researched, oral, nonhormonal technique has at last become available for the management of functional uterine bleeding (menometrorrhagia).*

a new concept

Antihemorrhagic in effect, BLUTENE bears no structural resemblance to any existing antimenorrhagic medication. One 100-mg. tablet taken with each meal at the time of bleeding will relieve symptoms in many patients, frequently within one course of treatment.

recurrence infrequent

Lathrop and Carlisle¹ have reported on the use of BLUTENE in 63 cases of hypermenorrhea. Results were "good" in 45 patients, "fair" in 15. Only two patients in the "good" group later experienced persistent recurrence. When menorrhagic symptoms do recur, they are often promptly controlled with an additional course of BLUTENE.

well tolerated

Various investigators^{1,2,3} have noted that side effects from BLUTENE are transient or relatively minor in nature. Occasional nausea, tenesmus, or burning on urination are usually relieved by increased water intake, or decreased dosage, or both. In many cases, side reactions are entirely absent.

BLUTENE often succeeds where other forms of therapy have failed. Write today for literature. In sugar-coated tablets, 100-mg., bottles of 25 and 100.

Abbott Laboratories, North Chicago, Ill.

*Important: BLUTENE should be used only after adequate gynecologic examination has ruled out organic disease as the cause of bleeding.



1. Lathrop, C. A., and Carlisle, W. T., Oral Toluidine Blue in the Treatment of Hypermenorthea, Amer. J. Obst. & Gynec., 64:1376, December, 1952.
2. Rumbolz, W. L., Moon, C. F., and Novelli, J. C., Use of Protamine Sulfate and Toluidine Blue for Abnormal Uterine Bleeding, Amer. J. Obst. & Gynec., 63:1029, May, 1952.
3. Bickers, W., Toluidine Blue—An Evaluation in the Treatment of Uterine Bleeding, in press, Amer. J. Obst. & Gynec.

Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-249

THE CLUE

ATTENDING M.D: The next patient has some perplexing cardiac findings but without symptoms. In fact he was admitted for regulation of his diabetic state, not for cardiac reasons.

VISITING M.D.: What seems to be the trouble?

ATTENDING M.D: Well, the first sug-



gestion of possible heart disease came from the roentgenologist, who reported dextrocardia. I must admit that my physical examination had failed to detect the unusual position of the heart. Nevertheless, in my own defense I will say that this man's heart is not very far out of position.

VISITING M.D: If the heart is predominantly to the right of the midline the criterion for the simple diagnosis of dextrocardia has been fulfilled. However, there is more than one form of dextrocardia, and a more exact diagnosis should be sought.

ATTENDING M.D: I actually think the roentgenologist might be wrong, for the electrocardiogram fails to show a mirror-image pattern in lead I.

PART II

VISITING M.D: I'd advise you not to be overly hasty in correcting our radiologists, for they are seldom wrong. But we are getting ahead of ourselves. You say the patient has had no symptoms of heart disease. Before seeing the roentgenogram may I examine . . . incidentally, how old is the patient?

ATTENDING M.D: He is a 22-year-

clinically
accepted
for treatment
of
HYPERTENSION

VERALBA

(Brand of Protoveratrines A and B)



Recent clinical investigations show that protoveratrine produces a significant decrease in systolic and diastolic blood pressures. With adequate dosage, this well-tolerated veratrum derivative can often maintain blood pressure near normal levels indefinitely, and alleviate such symptoms as headache, insomnia, delirium, dizziness, and blurred vision.

Effective dosage for the individual patient can usually be readily established with Veralba, which is available in both 0.2 mg, and 0.5 mg, grooved tablets.

Write for literature and "dose-establishment" package



CHEMICALLY STANDARDIZED ... FOR OPTIMAL CONTROL OF DOSAGE

- The therapeutic range of protoveratrine is narrow. Hence, continued response to established dosage requires an accuratelystandardized dosage form.
- Veralba is the only protoveratrine preparation standardized by *chemical assay*. The potency of Veralba Tablets is not permitted to vary from lot to lot by more than 3%, plus or minus.



PITMAN - MOORE COMPANY

Division of Allied Laboratories, Inc. • Indianapolis 6, Indiana

old college student. (They enter the patient's room and, after the visiting physician has completed an examination, return to the corridor.)

VIS.TING M.D: I believe your failure to note the unusual position of the heart is excusable, since the left border can be percussed some 5 cm. to the left of the midsternal line in the third interspace and no apical impulse can be felt. However, you apparently were less careful in percussion to the right of the sternum, for definite dullness extends about 6 cm. out from the midsternal line in the third and fourth interspaces. I could not palpate a thrill, although there is a fairly rough systolic murmur, grade 2, audible directly over the sternum and in the second left interspace adjacent to the sternum. The heart tones are normal, as are the rate and rhythm. The blood pressure?

ATTENDING M.D: I found it to be 125/76 mm. of mercury in the arms and somewhat higher in the legs. All peripheral pulsations were felt. Also, there is no situs inversus. The liver dullness is normally located, and the gastric gas bubble is percussible in the left upper quadrant. The stomach's normal position was confirmed by fluoroscopic examination.

VISITING M.D: Let's take a look at the chest film. (Attending physician places the film on the viewing box.) Yes. The heart is predominantly to the right, but chiefly retrosternal. It is globular in shape without a well-defined apex and does not appear enlarged. The pulmonary artery is not unduly prominent and the aortic arch is to the left. The lung fields are clear. What about fluoroscopic examination?

ATTENDING M.D: Except for positioning, nothing abnormal was noted. A roentgenkymogram was made in the posteroanterior view and revealed equal and large pulsations along the lower two-thirds of both borders of the cardiac silhouette.

PART III

VISITING M.D: That would suggest that the lower part of each border is formed by ventricle in contrast to the normal finding of small auricular pulsations along the entire right border. What about the electrocardiogram?

ATTENDING M.D: Here it is. The T wave in standard limb lead I is diphasic but nothing else is abnormal. No mirror-image picture.

VISITING M.D: No, and no axis deviation although there is a deep Q_3 wave. The precordial leads are interesting in that the highest R wave occurs in V_2 with progressive diminution in height through V_6 . This suggests the largest ventricular muscle mass is just beneath the sternum.

ATTENDING M.D: Where does all this leave us? Does he have heart disease?

PART IV

VISITING M.D: First of all let's decide about positioning of the (Continued on page 170)

ALL TYPES OF RETENTION CATHETERS by A. C. M. I.

A RETENTION CATHETER FOR EVERY PURPOSE, MADE OF PURE LATEX AND OF THE FINEST QUALITY THAT SUPERIOR WORKMANSHIP CAN PRODUCE



Cat. No. 2327 Foley Retention Catheter 5cc Even Size Only

12F through 30F



Cat. No. 2327-A Foley Retention Catheter 5cc Short Tip. Even Sizes Only 12F through 30F



Cat. No. 2498 Foley-Wolf Retention Catheter 5cc Whistle Tip. Even Sizes Only 12F through 30F



Cat. No. 2500-C Owens Retention Catheter 5cc Even Sizes Only 18F through 26F





American Cystoscope Makers, Inc.

Bacitracin . . . Neomycin—"the best of the newer local antibiotics"

plus Propesin—non-irritating local analgesic

for oropharyngeal and tonsillar infections



DU-BIOTIC TROCHES

In superficial infections of the pharynx, tonsils, and mouth, Du-biotic Troches provide the complemental, antibacterial effectiveness of two superior antibiotics, which are seldom used systemically and are virtually non-irritating and non-sensitizing.

Each deliciously flavored troche contains:

BACITRACIN (200 units)—hemolytic streptococci that commonly cause acute tonsillitis and pharyngitis are "particularly susceptible" to bacitracin.

NEOMYCIN (3.5 mg.)—remarkably bacteriostatic and bactericidal against a wide range of pathogens and is "superior to other available antibiotics for Staphylococci organisms."³

PROPESIN (2.0 mg.)—non-irritating local analysis for dependable, long-lasting relief of throat discomfort.

Supplied: Vials of 15.

Also available: Du-biotic Intranasal (Bacitracin-Neomycin nose drops).

- 1. Poole, W. L.: Discussing Forbes, M. A. Jr., Clinical Evaluation of Neomycin in Different Bases, Southern M. J. 45:235 (March) 1952.
- 2. Meleney, F.L. et al.: Surg. Gynec. & Obstet. 94:401, 1952.
- 3. Waksman, S.A.: Neomycin, Rutgers U. Press, 1953, p. 194.

Bacitracin . . . Neomycin—"the best of the newer local antibiotics"

plus Phenylephrine—widely preferred vasoconstrictor

—nasal and sinus infections

White's

DU-BIOTIC INTRANASAL

ANTIBACTERIAL—potent (frequently synergistic) effect of combined bacitracin-neomycin against all common gram-positive and gram-negative bacteria. No systemic side effects—virtually no sensitivity reactions,

DECONGESTIVE—rapid, prolonged decongestive action—without rebound congestion—of the time-tested vasoconstrictor, phenylephrine hydrochloride. Provides symptomatic relief—assures full antibiotic efficacy at site of infection.

Supplied: When constituted by the pharmacist, dropper bottles contain 15 cc. of an isotonic solution at physiological pH which retains its antibiotic potency for three weeks at room temperature.

Also available: *Du-biotic Troches* (Neomycin-Bacitracin)—for relief of throat infections.

1. Poole, W. L.: Discussing Forbes, M. A. Jr., Clinical Evaluation of Neomycin in Different Bases, Southern M. J. 45:235 (March) 1952.

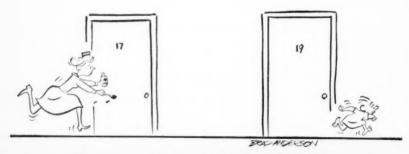
White Laboratories, Inc., Kenilworth, N. J.

heart. Dextrocardia can be congenital or acquired. In this case there is no thoracic or pulmonary lesion to cause displacement of the heart, so the dextrocardia is evidently congenital.

ATTENDING M.D. But I thought . . . VISITING M.D: I know. You thought that chamber inversion with mirror-image electrocardiogram would be found with congenital dextrocardia. Well, in most cases the chambers are inverted as with situs inversus totalis. Also, chamber inversion dextrocardia can occur as an isolated finding, that is, with the other viscera normally positioned. This case is an illustration of what has been called Type III dextrocardia -congenital, isolated, without chamber inversion. The electrocardiogram usually shows an abnormal T₁ wave and often a deep Q2 or Q3 wave. Precordial leads vary with the extent of the displacement but the main left ventricular muscle mass will be farther to the right than normal.

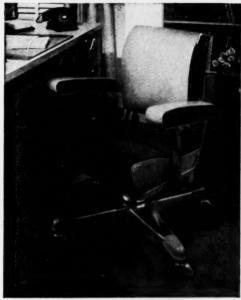
ATTENDING M.D: How about prognosis?

VISITING M.D.: When a part of situs inversus totalis, the heart is characteristically normal in all respects but position. With isolated dextrocardia and chamber inversion, serious congenital cardiac complication is almost the rule. When the dextrocardia is isolated but without chamber inversion, as in this patient, the prognosis depends on the presence or absence of complicating anomalies. Although pathologic data suggest that most cases of this type are complicated, the clinical impression is that many have otherwise normal hearts. Certainly there is no evidence of associated pathology here and further studies are not indicated so long as the patient is free of symptoms. Angiocardiography or cardiac catheterization may have to be resorted to should cardiac symptoms develop. For my part, I would reassure the patient that his heart is normal.



170 MODERN MEDICINE, October 15, 1953





Royal seating for a man of professional standing

- Spacious seat, back and arm rests of specially shaped, resilient U.S. Koylon foam rubber.
- Distinctive two-tone uphoistery combines fine Royalpoint weave with durable Super-Tuftex vinyl plastic.
- "Floating" back follows body, raises or lowers easily to best position for your personalized comfort.
- Precision tilt-and-swivel mechanism adjusts seat height, back height, seat tilt and back tilt tension through simple, ← flawless, accessible controis.
- Hooded, soft rubber ball bearing casters. Rubber kickplates on streamlined island base protect satin finish.

We prescribe this handsome, precision-built chair for genuine comfort and a lifetime of flawless use in your office. It is a chair that lends prestige to your position, smartly designed and custom finished in lustrous Royal Plastelle finish on square tubular steel. For matching units, and other fine metal furniture, write for free Royal catalog today!

Royal . . . your only single source for over 150 metal furniture items



ROYAL METAL MFG. CO.

175 N. Michigan Ave., Dept. 120, Chicago 1

Factories: Los Angeles • Michigan City, Indiana • Warren, Pa. • Walden, N.Y.
Galt, Ontario
Showrooms: Chicago • Los Angeles • San Francisco • New York City

How to treat Seborrheic Dermatitis of the scalp

simply, effectively

Here is an unusually effective, yet simple-to-use treatment...for your prescription only. Selsun Sulfide Suspension is applied while washing the hair, allowed to remain in contact with the scalp for a total time of five minutes, and then rinsed out. There are no nightly application ordeals to go through, no greasy preparations to discomfort the patient or leave stains on clothing and linens. It is recommended that Selsun be used twice a week for the first two weeks, but thereafter applications may be necessary only at intervals of one to four weeks, depending upon the severity of the condition.

Clinical reports of 400 cases 1.2.3 showed *Selsun* to be effective in 92 to 95 percent of cases of common dandruff, and in 81 to 87 percent of all cases of seborrheic dermatitis. Many of these patients had previously tried other scalp medications without satisfaction. Optimum results were obtained with *Selsun* in four to eight weeks, although itching and burning symptoms were alleviated after the second or third application in the majority of cases.

Extensive research on toxicity 1,2 showed Selsun to have no harmful effects when used externally as recommended. Available at pharmacies in 4-fluidounce bottles, Selsun is dispensed only on the prescription of a physician. Bottles have tear-off labels.

WRITE FOR LITERATURE on this outstanding new product.
Address: Dept. 022, ABBOTT LABORATORIES, North Chicago, Illinois.

References

- 1. Slinger, W. N., and Hubbard, D. M. (1951), Arch. Dermat. & Syph., 64:41, July.
- 2. Slepyan, A. H. (1952), Ibid., 65:228, February.
- 3. Ruch, D. M. (1951), Communication to Abbott Laboratories.

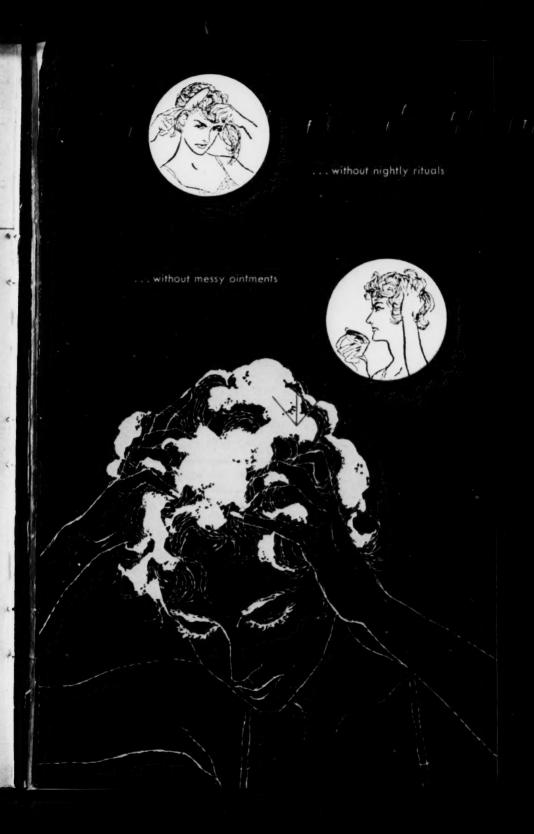
PRESCRIBE

SELSUN



SULFIDE suspension

(SELENIUM SULFIDE, ABBOTT)



SHORT REPORTS FROM ABROAD

AUSTRIA

Treatment of Hypertension. An extract of the Indian herb Rauvolfia serpentina has been used in 83 cases in Vienna. The findings confirm the extensive favorable experience that was made with the extracts in India. Dr. F. Klausgraber of the Evangelist Hospital notes that in 63% of cases the drug causes a gradual, significant drop in systolic and diastolic pressure. Partial success was achieved for 23% of patients and these were further benefited by additional treatment with conventional methods. The drop in blood pressure was accompanied by improvement in other diagnostic indications, except in nonprotein nitrogen. The drug also has strong sedative action but is well tolerated. No side effects were encountered.

SWITZERLAND

Alopecia after Anticoagulant Therapy. Loss of hair sometimes follows treatment with anticoagulants. Drs. R. Fischer, J. Bircher, and Th. Reich of the state hospitals of St. Gallen and Walenstadt report that of 100 patients treated with one or more anticoagulants, such as heparin, dicumarol, or Tromexan, 51 had loss of hair starting about eight weeks after institution of the

anticoagulant treatment. Alopecia varied from insignificant loss to complete baldness. The condition resembled alopecia symptomatica seen with grave toxic conditions, especially after poisoning with heavy metals. The 51 patients who had lost hair also complained of fatigability, irritability, and depression much more than did the other 49 patients.

The incidence of alopecia was higher for patients given combinations of short and long-acting anticoagulants, but no relationship could be found between the duration and intensity of treatment and the subsequent hair loss. Women seemed to be affected slightly more than men.

ARGENTINA

Novocain for Stone Colic. A simple and harmless way to obtain fast relief in cases of severe stone colic is described by Dr. Roberto Pedreira of the Rivadavia Hospital. When 1% novocain was slowly injected intravenously to 422 patients who had either gallstones or kidney stones, pain disappeared within ten minutes in over half the gallstone cases. The novocain alone was less satisfactory with kidney stones, but a combination of novocain with intravenous hexamethylenetetramine and intramuscular papaverine with

VIFORT'

NO FISHY TASTE OR ODOR

bottles of 30, 100, and 250 soft goldten capsules

also supplied

1 Sabel & F. and Mar archer A A. A.M.A. Am. J. Dr. Child 84 609, 1952

aqueous polyvitamin in small particle size

vitamin A 1½ to 2½ times better absorbed from VIFORT than from comparable polyvitamin capsules'

synthetic vitamin D vitamin B₁₂

> five other B vitamins

vitamin C and vitamin E

VIFORT for maximum polyvitamin absorption

Endo

ENDO PRODUCTS INC.

magnesium sulfate alleviated the distress in 75% of the cases. Novocain also produced a welcome sedative effect; the only side reaction encountered was a slight transient hypotension in 38% of cases.

9

Dihydroergotamine for Herpes Zoster. When oral dihydroergotamine was given to 30 patients aged 6 to 71 with herpes zoster, all but 3 were cured in five to nine days and 2 others improved, reports Dr. Carlos Cancio. The drug was given twice daily and 5% Ichthyol ointment was applied topically. No side effects were noted.

FRANCE

Cortisone for Infectious Mononucleosis. Rapid improvement often results from the administration of cortisone in cases of infectious mononucleosis.

Drs. M. Janbon and L. Bertrand of Montpellier gave cortisone to 4 patients orally in doses of about 100 or 200 mg. daily for two or three days, starting therapy at the height of the disease. Temperature dropped to normal levels within less than forty-eight hours afte, the first dose. The tumefaction of the involved lymphatic tissues, whether of the peripheral lymph nodes, tonsils, or liver, decreased rapidly. A patient with a severe typhoid form of infectious mononucleosis that was accompanied by jaundice came out of a state of prostration the day after cortisone was started.

The action of cortisone apparently lies primarily in the inhibition of the hyperplasia and reaction of the mesenchymal tissue. To prevent complications, antibiotics are ordinarily administered simultaneously.

2

Somnotherapy in Psychiatric Cases. The curative effect of prolonged physiologic sleep, advocated by the school of Pavlov in Russia, has recently been tried in 10 psychiatric cases by Drs. J. Bastié and A. Fernandez of Toulouse. The subjects slept eighteen to twenty hours daily for over three weeks, being fed and cared for during waking hours. The treatments were carried out in a closely supervised, isolated part of the hospital. Sleep was induced and maintained by bromides, chloralose, and barbiturates, supplemented by morphine and autonomic blocking agents. The procedure was tolerated well; cures were obtained in 4 cases, and definite improvement in the other 6.

3

Reduction of Side Effects of Cortisone. Testosterone may be used to prevent the adrenal atrophy produced in man by cortisone therapy. Animal experiments have shown that the irreversible atrophy of the adrenal cortex produced by prolonged administration of cortisone can be prevented by simultaneous use of testosterone. Drs. J. Turiaf, L. Zizine, and Y. Jeanjean of Paris have extended this obser-

A new useful combination —

therapy: GANTRICILLIN®300 'Roche.' Each tablet
provides 300,000 units of
penicillin PLUS 0.5 Gm of
Gantrisin®, the highly
soluble, wide-spectrum
single sulfonamide.

Gantricillin-300
- a new
antibacterial —

For wide-spectrum, oral antibacterial therapy -Gantricillin -300 'Roche'Gantrisin plus penicillin in a single tablet.

vation to human beings. When testosterone was given weekly to 12 patients receiving cortisone, cortical activity was maintained as measured by the Thorn test in 6 cases and the antiarthritic action of cortisone was not affected. In a control series in which testosterone was not given, every patient had declining adrenal cortical function. Testosterone was of benefit when given after the cortisone therapy.

4

Hydrocephalus and Vitamin A Dosage. A single massive dose of vitamin A may cause acute but benign transitory hydrocephalus in infants. Drs. Julien Marie and G. Sée of Paris describe 7 cases in which accidental ingestion of a single dose of about 350,000 units of vitamin A, with or without vitamin D, resulted in the development of an acute hydrocephalus within twentyfour hours.

Bulging of the fontanels, stupor, and anorexia are sometimes preceded by projectile vomiting. Spinal puncture at the height of the manifestations reveals an elevated intraspinal pressure. Symptoms disappear within one or two days without neurologic sequelae.

5

Inconspicuous Hairline Scars. In the experience of most plastic surgeons, meticulous intracutaneous sutures yield the least conspicuous scars. Tying the suture by conventional methods, as over tiny lead balls, puts the wound edges under compression and thus distorts the line and the approximation. Dr. G. Ginestet of the Foch Surgical Center, Suresnes, uses a small ruler of plastic material which is slightly longer than the wound and is notched at both ends. When the 2 ends of the suture are tied over the ruler the wound edges are put on tension instead, with resulting excellent approximation and a hairline scar. Thin continuous nylon suture is used and is removed five to seven days after operation.

FINLAND

Adrenocortical Damage in Graves's Disease. Advanced toxic hyperthyroidism may damage the adrenal cortex.

Among 43 patients with Graves's disease, Dr. Klaus A. J. Järvinen of the University of Helsinki found 4 with symptoms of adrenocortical insufficiency. The skin was deeply pigmented, with typical addisonian distribution, in 3 cases; others had increased sodium and chloride requirements. The patients tired easily and had muscular weakness. In 1 case an acute addisonian crisis developed which responded well to desoxycorticosterone acetate. In 2 cases, diagnosis of adrenocortical insufficiency could be confirmed at autopsy examination. This unusually high incidence of adrenocortical damage in the presence of longstanding hyperthyroidism seems to indicate that exhaustion follows a long period of adrenocortical stimulation mediated through the hypophysis.

GERMANY

Latent Damage in Carbon-Monoxide Poisoning. Apparent immediate recovery after acute carbon-monoxide poisoning does not preclude delayed injury to the central nervous system.

Dr. Klaus Speckmann of the University of Kiel finds that among 49 patients who recovered after acute carbon-monoxide poisoning, 14 now have psychic and neurologic deficiency symptoms. Difficulties in concentration, impaired memory, headaches, fatigability, and excessive irritability as well as instability and loss of initiative and interest can be noticed.

Neurologic examinations reveal pyramidal and extrapyramidal lesions, hypokinesia, globus pallidus damage, and alterations in the flexor-extensor chronaxy relationship. These focal lesions are the result of capillary damage produced by the temporary anoxia during the acute stage of poisoning.

Collagen in Surgical Hemostasis. Tampons of collagen are effective hemostatic agents, especially when parenchymatous organs such as the liver, lung, or kidney are involved. Unlike gelatin or cellulose sponges, also used for hemostasis, collagen is not a favorable nutritive medium for bacteria and may therefore be used in infected areas.

Dr. Kurt Schwädt of the State Hospital, Bayreuth, employs collagen sponges made from animal tendons and prepared in flat squares that are easy to cut or bend to fit the bleeding surface. No preliminary moistening is necessary, but the sponge should be kept in place and some pressure exerted for a short time after application.

Collagen sponges may also be used in plastic operations to fill defects and combat venous bleeding. No intolerance or pronounced local reactions are observed.

Somnotherapy in Poliomyelitis. The importance of absolute bed rest in the earliest stages of poliomyelitis is generally recognized, but achieving rest for active children and adolescents is not always an easy accomplishment.

Drs. Th. Brehme and W. Leuterer of Children's Hospital, Braunschweig, report use of Somnifen for 39 of 65 patients with clinically incipient poliomyelitis. The patients were kept in a semistupor. Since this therapy cannot be used in cases of bulbar involvement, the patients have to be supervised closely at all times. Paralysis of some type developed in 4 of the 39 patients given somnotherapy and in 5 of the 26 not so treated.



OF PARENTERAL NUTRITION

5 NEW

Travert 10%-Electrolyte solutions

all the advantages of Travert*

replacement of
electrolytes, and
correction of acidosis
and alkalosis

* Travert 10% Solutions provide:
twice as many calories as 5% dextrose,
in equal infusion time,
with no increase in fluid volume;
a greater protein-sparing action as
compared to dextrose;
maintenance of hepatic function.

| Selectron | Sele

Wallet cards as shown available on request

products of

BAXTER LABORATORIES, INC.

Morton Grove, Illinois . Cleveland, Mississippi

DISTRIBUTED AND AVAILABLE ONLY IN THE 37 STATES EAST OF THE ROCKIES (EXCEPT in the city of EI PASO, TEXAS) THROUGH A MERICAN HOSPITAL SUPPLY CORPORATION

GENERAL OFFICES • EVANSTON, ILLINOIS



The TINY GIANT

Element of Biological Necessity

Organidin[®]

SOLUTION

IODINE ORGANICALLY COMBINED

THE UNFOLDING SECRETS OF METABOLISM REVEAL MAN'S DEPENDENCE UPON IODINE AS THE "ELEMENT OF BIOLOGICAL NECESSITY"

IODINE poverty and mild hypothyroidism appear to be part of the aging process after the 40th year. The most prominent complaints of this age group are chronic fatigue, poor memory, and sleeplessness.

IODINE medication in these patients with beginning thyroid inadequacy may be of real benefit in restoring mental alertness and physical vigor.

Evidence is accumulating that mild iodine deficiency and hypothyroidism may produce cumulative harm in contributing to hypercholesterolemia, myocardial damage and mental regression. Judicious use of Iodine may well prove to be an important preventive and corrective measure after the 40th year.

ORGANIDIN WAMPOLE is a unique, well-tolerated, standardized iodine preparation which is the result of original research in the laboratories of Henry K. Wampole & Co., Inc. Consistently satisfactory therapeutic results have established Organidin as the Iodine preparation of choice among the vast majority of physicians.

Supplied: 30-cc. bottles with dropper. Literature and sample on request.

WAMPOLE LABORATORIES

HENRY K. WAMPOLE CO., INCORPORATED • PHILADELPHIA 23, PA.

Crampton, C. W., The Merck Report, 57:26 (1948)

Kimble, S. T., and Steiglitz, E. J., Geriatric 7:20 (1952)

AVAILABLE IN A

New Dosage FORM

AS

Organidin[®]

TABLETS

IODINE ORGANICALLY COMBINED

Each Tablet Equivalent to 10 Minims of Solution, 1/4 gr. of Iodine.

DOSAGE RECOMMENDATIONS

- 1. Thyrotoxicosis (preoperative and postoperative Treatment): One tablet one to three times daily.
- 2. Arteriosclerosis, Angina Pectoris, Essential Hypertension: One to three tablets, three times daily.
- 3. Rheumatic affections, asthma, bronchitis, the Common Cold, and other infections: One to three tablets, three times daily.

Supplied: Bottles of 100 tablets

WAMPOLE LABORATORIES
HENRY K. WAMPOLE CO., INCORPORATED
PHILADELPHIA 23, PA.

Oncology

Tumor and Colchicine

Radioactive colchicine tends to accumulate in the spleens of healthy mice and in the intestines of tumorbearing mice or those given injections of tumor homogenates. Influence of sarcoma on colchicine distribution was investigated by Drs. E. J. Walaszek and A. Back of the University of Chicago. Shortly after injection of colchicine into animals with tumor, cell-free extracts of large growths contained 2 active fractions, separable by chromatography. Both were heatlabile, nondialyzable, nonprotein in character, and associated with lipids. The spleen was chiefly affected by one fraction and the intestine by the other.

Federation Proc. 12:377, 1953.

Hematology

Plasma Protein Patterns Observed in Hemophilia

Electrophoretic plasma protein patterns of hemophilic patients and some members of hemophilic families present anomalies designated as α_x -globulin and related to low prothrombin utilization. The anomaly was present in each of 14 active hemophilic subjects studied by Dr. Peter Bernfeld and associ-

ates of Tufts College, Boston, and also in over 50% of nonbleeding members of hemophilic families. Unlike the bleeding manifestation of hemophilia found only in males, the electrophoretic anomaly is seen in females as well as in males. However, women not possessing a_x-globulin, as well as women with the anomaly, may be carriers of hemophilia. Low prothrombin utilization, as indicated by low prothrombin time, appears in the plasma of hemophilic persons and also in the nonbleeding family members with a_x -globulin in the plasma.

Proc. Soc. Exper. Biol. & Med. 83:311-315,

Nutrition

Diet and Longevity

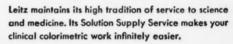
A high-fat diet is seemingly detrimental to male but not to female rats. Life span of rats was determined by Dr. C. E. French and associates of Pennsylvania State College, State College. Standard rations were given to one group, and 80% standard food plus 20% corn oil or sucrose to the others. All females lived about the same length of time, but the fat-fed males reached the 50% survival point at the average age of 680 days, in contrast to 775 days with other diets. Federation Proc. 12:414, 1953.



ROUY-Photrometer

use the best

Solution Supply Service



Preparing solutions and reagents demands accuracy and uniformity, time and effort. Leitz does all this preparation for you, delivers fresh supplies promptly upon receipt of your order, saves you all the burdens.

SOLUTIONS AND REAGENTS: Leitz uses only the purest chemicals which meet the high standards of the American Chemical Society. You get consistent results from large scale production and carefully controlled conditions.

GLASSWARE: Available for you are special pipettes, absorption cells, blood sugar tubes and all other necessary items to run your determinations...a stainless steel test tube rack with snap-on cover for easy washing, draining and drying of 16 absorption cells.

Leitz precision combination hemoglobin pipette (ratio tolerance within ±2%) Code word—LSPEC \$4.80.

Ask your dealer to demonstrate the Leitz Rouy-Photrometer, COMPARE it with any other instrument ... SEE the differences which make Leitz superior.

For details write Dept. M

E. LEITZ, Inc., 468 Fourth Ave., N. Y. 16, N. Y.

LEITZ SCIENTIFIC INSTRUMENTS MICROSCOPES BINOCULARS

LEICA CAMERAS AND ACCESSORIES

BAND-AID

TRADE-MARK

with new SUDOP







Patch

Spot

Strip

Plastic Bandages

Stick

They stick faster, stay on better than any other bandages.

Johnson Johnson

Cytology

Antihiotic Effect on Spermatozoa

Therapeutic doses of commonly used antibiotics apparently have no effect on human spermatozoa. Drs. Harry Seneca and Diane Ides of Columbia University, New York City, report that penicillin, streptomycin, terramycin, aureomycin, and neomycin demonstrate no activity in vitro against spermatozoa. However, bacitracin and fumagillin are damaging to the sperm cells and large doses may have a deleterious effect on spermatogenesis. Rimocidin and thiolutin, too toxic for systemic administration, produce immobilization of the reproductive cells in vitro. Polymyxin appears to stimulate motility of spermatozoa. Magnamycin and viomycin are slightly toxic and isonicotinic acid hydrazide is nontoxic.

J. Urol. 70:306-311, 1953.

Hematology

Platelet Transfusions

Hemorrhagic tendencies of irradiated dogs and rats are diminished by the injection of homologous blood platelets. Studies of lymph-cannulated animals exposed to large doses of roentgen rays demonstrate the relationship between platelet counts and bleeding, since passage of erythrocytes into the lymph is seen only when platelet levels are reduced. Dr. M. C. Woods and associates of Oak Ridge National Laboratory, Oak Ridge, Tenn., find that platelet injections during the hemorrhagic phase result in clearing of the lymph within an hour

and retardation of further passage of blood cells. Blood platelet and lymph erythrocyte levels are a sensitive indication of the severity of postirradiation hemorrhage before the appearance of anatomic signs. Blood 8:545-553, 1953.

Gastroenterology

Intragastric Temperature

Variations in gastric temperature occur during hunger contractions and in gastric ulcer activity. Dr. H. B. Benjamin and associates of Marquette University, Milwaukee, find that intragastric temperatures in healthy subjects take a sharp dip to lower levels approximately one-half hour after desire for food and return to previous or near previous plateau levels shortly thereafter, when hunger pangs subside. A jacketed intragastric thermopile with a weighted balloon attached to the lip of the jacket was used to determine gastric temperature. Oral temperature consistently ran 1 to 3 degrees lower than intragastric temperature. Automatic temperature recordings in patients with prepyloric ulcers indicated that gastric temperature is related to the degree of activity of the ulcer. In hunger, temperature changes may be due to muscular contractions of the stomach leading to a scarcity of oxygen and reduction of regional metabolism. Activity of an ulcer is always associated with hyperactivity of the stomach as well as hypersecretion, and, because activity is always attended by increased blood flow and oxygen consumption, temperature must follow suit.

Surg., Gynec. & Obst. 97:19-24, 1953.

fast-acting salicylate formula HIGH in analgesic power Low in risk to the patient

Recent studies 1,2 suggest that the time-tried salicylates exert a hormonal action similar to that of ACTH, stimulating release of cortisone.

Whenever rapid and sustained salicylate action is desired. ELPAGEN gives your patient the benefits of a potentiated salicylate combination in uncoated tablet form-without the gastric irritation of unmodified salicylates and without the potential dangers (or expense) of ACTH or cortisone itself.

ELPAGEN/PATCH

Each orange-colored, uncoated tablet provides:

Sodium salicylate... 5 gr. (325 mg.)

Sodium paraaminobenzoate.... 3 gr. (195 mg.)

POTENTIATED SALICYLATE BLOOD LEVELS Salicylamide...... ½ gr. (32.5 mg.)

plus

Ascorbic acid 30 mg. (as sodium ascorbate)

SAFEGUARD AGAINST VITAMIN C DEPLETION AND CAPILLARY HEMORRHAGE

Dihydroxy aluminum aminoacetate.... 1/2 gr. (32.5 mg.)

BUFFERING ACTION OVERCOMES GASTRIC INTOLERANCE³

SUPPLIED in bottles of 100 and 500 tablets

1. Van Cauwenberge, H.: Lancet 261:374, 1951; Van Cauwencet 261:374, 1951; Van Cauwen-berge, H., and Heusghem, C.: Proc. Soc. Exper. Biol. & Med. 80:51, 1952. 2. Pelloja, M.: Lancet 1:233, 1952. 3. Paul, W. D., et al.: J. Am. Pharm. A., Scient. Ed. 39:21, 1950.

THE E. L. PATCH COMPANY

STONEHAM

MASSACHUSETTS

the realization of a hope ...

a new physio-chemical complex that consistently and significantly reduces elevated serum cholesterol levels.

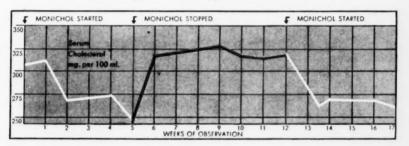




This typical response of an idiopathic hypercholesteremic patient to an uninterrupted daily intake of Monichol — an entirely non-toxic medication — shows a significant drop from 306 mg. to 240 mg. per 100 ml. of serum cholesterol after five weeks of medication.

The investigators[†] stress the need for continued administration of Monichol because idiopathic or familial hypercholesteremia is most probably an *inborn error of metabolism*.

Uninterrupted Daily Intake of Monichol Essential in the Management of Hypercholesteremia



Please note the prompt rise of the serum cholesterol to pre-treatment levels when medication was stopped. We, therefore, urge you to ask your patients to have their prescriptions refilled as soon as their supply is exhausted.

Indications: For the therapeutic and prophylactic management of hypercholesteremia so frequently associated with cardiovascular disease and diabetes.

Dosage: The recommended dosage of 1 teaspoonful four times or two teaspoonfuls twice daily after meals is both the minimum and the optimum dosage.

Formula: Each teaspoonful (5 cc.) contains:

Polysorbate 80 500 mg. Choline Dihydrogen Citrate 500 mg. Inositol 250 mg.

Supplied: Bottles of 12 oz.

†Sherber, D. A., and Levites, M. M.: Hypercholesteremia. Effect on Cholesterol Metabolism of a Polysorbate 80-Choline-Inositol Complex (MONICHOL) J.A.M.A. 152:682 (June 20) 1953. *Trademark

Monichol normalizes cholesterol metabolism

IVES-CAMERON COMPANY, INC., 22 East 40th Street, New York 16, N.Y.

Fungicides

Therapy of Moniliasis

Protection against a lethal mixture of Candida albicans and aureomycin may be afforded by a single dose of a fungiciden administered two hours before or at the time the infection is introduced into mice. The drug, Nystatin, has a powerful fungicidal and fungistatic activity against C. albicans alone and against sublethal inoculations made highly lethal when mixed with aureomycin, report Dr. Rachel Brown and associates of the New York State Department of Health, Albany and New York City. If therapy is delayed until two hours after infection, only slight benefit results, but continued treatment may save over half the mice.

Science 117:609-610, 1953,

Surgery

Caval Ligation Technic

Use of multiple ligatures of nonabsorbable suture material for continuous ligation of the inferior vena cava in dogs lessens the possibility of recanalization and future pulmonary embolism. Results of various ligation technics employed on 34 animals showed that recanalization is less likely to occur when long segments of the vena cava are obliterated by umbilical tape or multiple silk ligatures. When single ligatures of catgut or silk are used, the vena cava may recanalize in nine months to a year. Drs. Robert M. Miles and Joseph M. Young of the Kennedy Hospital, Memphis, obliterate the greatest segment by placing 2 ligatures of No. 4 silk approximately 2.5 cm. apart with a ligature of ½-in. umbilical tape between. Although the technic of ligation followed by division of the inferior vena cava remains the best insurance against potential pulmonary embolism, continuous ligation appears the safest and fastest method of interrupting caval continuity for the poor-risk patient.

Surgery 33:849-857, 1953.

Oncology

Adrenal Tumor Prevention

Development of postcastration adrenal cortical nodular hyperplasia in CH3 mice is prevented by hypophysectomy. Eradication of the gonads may act to promote adrenal hyperplasia by removing an inhibitory effect of sex hormone on the pituitary or by releasing to the adrenals the pituitary hormone normally absorbed by the gonads, suggest Drs. Donald J. Ferguson and Maurice B. Visscher of the University of Minnesota, Minneapolis, Food restriction in castrated and sham-hypophysectomized mice, to maintain body weights comparable to those of castrated hypophysectomized mice, does not prevent nodular hyperplasia of the cortex but apparently stops secretion of estrogen from the adrenal. A persistence of some important pituitary functions in spite of severe dietary restriction is indicated by a more profound atrophy of heart, liver, and kidneys in hypophysectomized mice than in underfed animals of equivalent weights.

Cancer Research 13:405-407, 1953.

FOR *PERHAPS THE MOST COMMON DEFICIENCY*

Iron deficiency anemia, "probably the commonest nutritional deficiency disease," occurs frequently in infants and children, particularly during periods of rapid growth. 2,3

A specific response is obtained in these cases with the use of Fer-In-Sol,[®] a concentrated solution of ferrous sulfate for convenient drop dosage. Fer-In-Sol is well tolerated, blends perfectly with fruit juices, and leaves minimum after taste.

(1) Youmans, J. B., in Handbook of Nutrition, Chicago, American Medical Association, 1951, p. 577; (2) Hansen, A. E., in Mitchell-Nelson Textbook of Pediatrics, ed. 5, Philadelphia, W. B. Saunders Co., 1950, p. 106; (3) Heck, F. J.: J.A.M.A. 148: 783, 1952. iron in drop

0.6 cc. contains 75 mg. (about 1 grain) ferrous sulfate. Available in 15 and 50 cc. bottles with calibrated dropper.



Fer-In-Sol

MEAD JOHNSON & COMPANY Evansville 21, Ind., U. S. A.



short REPORTS

Endocrinology

Induction of Anestrus

Oral administration of diethylstilbestrol almost always causes complete cessation of estrus in hogs. Daily doses of 2.5 to 250 mg, of stilbestrol were effective in suppressing estrus in 11 of 12 gilts weighing 75 to 100 kg.; the other gilt came into continuous estrus. Upon cessation of hormone feeding, normal reproductive function was resumed. J. W. Stevenson and N. R. Ellis of the U.S. Department of Agriculture, Beltsville, Md., find that stilbestrol usually produces uterine growth and mammary development resembling progressive stages of psuedopregnancy. Doses of 0.025 and 0.25 mg. of stilbestrol daily do not significantly change sexual function.

J. Applied Physiol. 5:549-554, 1953.

Surgery

Clotted Hemothorax Lysis

Effective dissolution of clotted hemothorax can be obtained with intrapleural injection of a crystalline trypsin solution. Used for 2 patients and in dogs with conditions that simulated clinical postoperative or traumatic hemothorax, crystalline trypsin did not interfere with reparative processes of lungs or vessels, report Drs. Charles E.

McCroskey and Creighton A. Hardin of the University of Kansa Kansas City. Severe chest pain almost uniformly appeared after intrapleural administration of trypsin. However, in dogs, an intrapleural injection of tetracaine before the trypsin injection controlled the pain effectively.

Arch. Surg. 66:650-655, 1953.

Metabolism

Cations in Hypertension

Restriction of dietary potassium to hypertensive patients results in small but significant decreases in blood pressure. Despite sodium retention accompanying the low potassium regimen, Dr. George A. Perera of Columbia University, New York City, reports that resting blood pressure levels rapidly decreased in the 4 patients observed. Menus to curtail potassium ingestion to approximately one-third to one-fourth of usual intake were unpalatable and unbalanced and were discontinued before cardiac complications might have been induced. However, the relationship between certain cations and the hypertensive state is demonstrated. Participation may be through adrenal cortical intervention or by direct action on the blood vessel walls or on neuromuscular transmissions.

J. Clin. Investigation 32:633-636, 1953.

for conception control with diaphragm

Ontho Kil



haric acid 3.00% - axygoinaline sulphake 0.025% g. Disabutylphenoxypolyethaxvethanol 1.00% Ortha% Creme viiginal cream - ricinaleic acid 0. bioric acid 2.00%, sadium lauryl sulphake 0.38%

Also available: Ortho* White Kit with flat spring Ortho* White Diaphragm.

for simple, effective conception control



Carcinomas

Tobacco Tars

Cigaret smoke condensed in flasks immersed in dry ice and ethanol yields acetone-soluble tars carcinogenic to mouse epidermis. When the solution was painted on the backs of CAF, mice, Dr. Ernest L. Wynder and associates of Washington University, St. Louis, and Memorial Center for Cancer and Allied Diseases, New York City, find that one-half the animals developed papillomas at about the thirteenth month. A carcinoma appeared in 1 instance in the tenth month and generally in the fifteenth month in 1 of every 6 animals. Some skin cancers metastasized to the lungs: others were successfully transplanted for several generations.

Proc. Am. A. Cancer Research 1:62-63, 1953.

Cardiology

Digitalizing Agent

The clinical action of acetyldigoxin, an oral preparation of digitalis, resembles that of digoxin. Administration of the drug to 26 patients with heart disease, 23 of whom had frank congestive failure, revealed little difference in results, despite experimental evidence of greater absorption of the newer drug. Dr. Charles D. Enselberg and associates of Montefiore Hospital, New York City, recommend for initial digitalization a single dose of 2 mg. of acetyldigoxin followed by 0.5-mg. doses every six to eight hours until a satisfactory effect is achieved. Maintenance may be accomplished with 0.4 to 0.7 mg. daily. Effects of a single full dose are manifest in

about two hours and reach a peak in about seven hours; dissipation is complete in approximately nine days. Slight toxic manifestations of nausea, vomiting, ventricular premature systoles, or yellow vision were noted in 6 cases. However, the ill effects disappeared within twenty-four hours after the drug was withdrawn or sharply reduced. In 7 cases, abrupt increases in ventricular rates accompanying minor emotional stimuli were lessened but not prevented by digitalization.

Am. Heart J. 45:909-913, 1953.

Antibiotics

Antiviral Penicillin

Lethal doses of the Newcastle disease virus are inactivated by incubation with 5,000 units of penicillin before injection into chick embryos. Previously thought to be refractory to penicillin, the virus is rendered noninfective up to 2 million ELD50 after three hours incubation with large doses of the antibiotic, reports Dr. Alexander Kohn of the Israeli Institute for Biological Research, Rehovoth, Israel. Protection up to 4,000 ELD₅₀ is achieved by 50,000 units of the antibiotic mixed with the virus and injected immediately into 10-day-old chicks. However, this high concentration of penicillin has no prophylactic or therapeutic activity if given before or after introduction of the virus. Acid, alkali, or penicillinase exposure apparently destroys the antiviral properties of penicillin, whereas heat has no effect upon the active agent.

Proc. Soc. Exper. Biol. & Med. 82:612-616, 1953.



MORE POWER

When injudicious food habits of long standing leave nutritional reserves dangerously low, intensive therapy is required for prompt replenishment of Vitamins and Minerals.

Viterra Therapeutic concentrates in one capsule sufficient amounts of Minerals and Trace Elements and the effective therapeutic potencies of essential Vitamins needed for rapid and complete correction of chronic deficiency states.

Whenever potent Vitamin-Mineral therapy is indicated, specify

Vi terra Therapeutic

each capsule | contains



VITAMIN A 25,000 U.S.P. Units	COPPER	1.0 mg.
VITAMIN D 1,000 U.S.P. Units	IODINE	0.15 mg.
VITAMIN B_{12} 5 mcg.	IRON	10.0 mg.
VITAMIN B_1 10 mg.	MAGNESIUM	6.0 mg.
	MANGANESE	1.0 mg.
NIACINAMIDE 100 mg.	MOLYBDENUM	0.2 mg.
VITAMIN C 150 mg.	PHOSPHORUS	80.0 mg.
CALCIUM103.0 mg.	POTASSIUM	5.0 mg.
COBALT 0.1 mg.	ZINC	1.2 mg.

J. B. ROERIG AND COMPANY, CHICAGO 11, ILLINOIS



to work together

Ordinarily folic acid is excreted more rapidly than vitamin B_{12} , of which a considerable amount is stored in the body 'til "saturation" occurs. Effectiveness of vitamin B_{12} may extend over several weeks as demonstrated by continuous remission of pernicious anemia.

IN FOLAMIN-12, LOSS OF FOLIC ACID IS RETARDED BY MACRO-SIZE PARTICLES

Thus its action is sustained—timed to be longer effective with vitamin B₁₂. In Nion Folamin-12, there are 5 milligrams of folic acid, U. S. P. present as macro-particles suspended in each cubic centimeter of solution containing 30 micrograms of crystalline vitamin B₁₂, U. S. P. Nion Folamin-12 is aqueous, buffered to maintain optimum pH, practically painless on injection, safe even for patients allergic to parenteral liver. Available in 10 cc multiple dose vials.

NION CORPORATION &



LOS ANGELES

Metabolism

Aureomycin in Diabetes

Chronic alloxan diabetic rats gain weight when given aureomycin. Although the antibiotic promotes food consumption, the weight increase occurs despite augmented glycosuria and diuresis. Aureomycin may have a direct and specific effect on the metabolism of the diabetic animal, believe Drs. Aharon M. Cohen and M. Rachmilewitz of the Hebrew University, Jerusalem, who noted substantial increases in weight among 25 rats with alloxan-induced diabetes given 20 mg. of aureomycin per 100 gm. of food for twentyeight days.

Proc. Soc. Exper. Biol. & Med. 83:50-52, 1953.

Medicine

Cardiac Resuscitation

Ventricular fibrillation in canine hearts can be stopped and competent contractions restored by applications of electric shock to the cardiac muscle. Electrically duced fibrillation in 75 dogs was terminated more successfully by use of countershock than by massage, epinephrine, or procaine, report Dr. René Wégria and associates of Columbia University and Presbyterian Hospital, New York City. Shock applied after thirty seconds of fibrillation results in a coordinated ventricular beat with a return to normal atrial blood pressure. However, if fibrillation is allowed to persist five minutes or more, continuous massage is first instituted in order to prevent circulatory and vasomotor damage before countershock can be used to restore competent contractions. Massage or epinephrine alone does not stop the fibrillation, but alters or prevents the process from becoming the slow, coarse type.

Circulation 8:1-14, 1953.

Experimental Therapeutics Therapy for Toxoplasmosis

Combined sulfadiazine and Daraprim treatment for experimental toxoplasmosis in mice is approximately twice as effective as either drug used alone. Mice were infected with 1,000 L.D.50 of Toxoplasma organisms and given diets containing 1.12 mg. per cent or more of Daraprim plus 5 mg. per cent or more of sulfadiazine. Of 295 animals, 53% were cured, report Drs. Don E. Eyles and Nell Coleman of the University of Tennessee, Memphis. The most efficient synergistic combination of the drugs to produce 50% survival for ten days is 1/8 the median effective dose of sulfadiazine plus 1/24 the median effective dose of Daraprim. Reducing the inoculum to 100 L.D.₅₀ results in a cure of 75% of the infected mice. Increasing the inoculum to 100,000 L.D.₅₀ reduces the cure rate to 8%. However, even the 100 L.D.50 inoculum is probably comparatively large in contrast to natural sources of infection. If medication is delayed until half the life expectancy of the infected mice has elapsed, the cure rate is 42% when the inoculum is 1,000 L.D.50.

Antibiot. & Chemother. 3:483:490, 1953.

vitamins A and D*

pass through

intestinal mucosal barrier

as compared with oily solutions



vi-syneral vitamin drops

aquasol A-C-D drops

u. s. vitamin corporation

Casimir Funk Laboratories Inc. (affiliate) 250 E. 43rd Street, New York 17, N. Y.

Doctor to Doctor

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent \$5. The Oct. 15 winner is

A. P. Leighton, M.D. Portland, Me.

Mail your caption to The Cartoon Editor Caption Contest No. 2

MODERN MEDICINE 84 South 10th St. Minneapolis 3, Minn.



"She says that she isn't going to eat any more of that dietary food, that in these days of adultery, she doesn't dare."

Building BLOCKS



Endocrinology

Morphine and Adrenals

Adrenal activity of morphine addicts falls during use of the drug and rebounds during withdrawal, judging from 17-ketosteroid excretion. Urinary values of 4 male subjects were determined at the Public Health Service Hospital, Lexington. Ky., by Dr. Anna J. Eisenmann and associates. During a five- to ten-week period of drug addiction, the hormone decreased 55% on the average. When morphine was stopped, eosinophil counts fell to nearly zero and hormone levels rose 80 to 500% above addiction levels but returned to premorphine status in three to four weeks.

Federation Proc. 12:200, 1953.

Cholesterol

Reduction of Atherosclerosis

A cholesterol-free extract of mammalian brain modifies atherosclerosis produced by a high-fat diet. In cockerels receiving 10% fat with chick starter-mash, serum cholesterol is lowered at least 50% by a 15% supplement of brain fraction. Dr. Richard J. Jones and associates of the University of Chicago also note definite improvement of aortic lesions in proportion to amounts of brain residue fed. The percentage of total serum lipids present as phospholipid varies directly with the quantities of residue added to the food, and the cholesterol-lipid phosphorus ratio varies inversely.

Federation Proc. 12:227, 1953.

GLUCONATE

THIAMIN HCI

RIBOFLAVIN

NICOTINAMIDE

LIVER FRACTION 2 2 gr.

5 gr.

2 mg.

2 mg.

20 mg

to Good Health...

FOLIC ACID 0.25 mg.

65 mg.

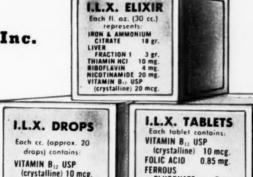
IRON & AMMONIUM

CITRATE

Kenwood Laboratories, Inc.

BROOKLYN 1, N. Y.

Literature and Samples Upon Request



MODERN MEDICINE, October 15, 1953 201

VASCULAR HEADACHE VASCULAR HEADACHE CAFERGOT CAFERGOT HEADACHE VASCULAR HEADACHE VASCUL RGOT CAFERGOT CAL VASCULAR HEADACHE VASCULAR HEADACHE CAFERGOT CAFERGOT HEADACHE VASCULAR HEADACHE VASCUL RGOT CAFERGOT CA. VASCULAR HEADACHE VASCULAR HEADACHE CAFERGOT CAFERGOT HEADACHE VASCULAR HEADACHE VASCUL RGOT CAFERGOT CA VASCULAR HEADACHE VASCULAR HEADACHE CAFERGOT CAFERGOT



in Migraine
and other Vascular Headaches

AS

Ci

JAC

ASC

DAC

ASC

CA

DACH

2 tablets of CAFERGOT® are taken at the first sign of an attack*

"The importance of administering this medication [Cafergot] early in the course of an attack, as well as in adequate doses, cannot be overestimated. Many failures in therapy are caused by an inadequate dose given too late. The optimal time of administration is in the prodromal period, or early in the attack itself."

Friedman, A. P., Modern Headache Therapy, St. Louis, C. V. Mosby Co., 1951, p. 114

If necessary, an additional 1 tablet dose every half hour until the attack is aborted or 6 tablets have been taken.

Each tablet of Cafergot contains 1 mg. of ergotamine tartrate and 100 mg. of caffeine.

Sandoz

łE

JL

DHADMACEUTICALS

DIVISION OF SANDOZ CHEMICAL WORKS, INC.



Soon-Cafergot Suppositories

Apparatus

Heart Output Recorder

The capacigraph is an instrument that measures the amount of blood pumped by the human heart. Operation of the capacigraph depends on the fact that variation in blood flow to any part of the body, such as the chest, alters electric capacitance of that part, explains Dr. Hubert Mann of New York City. A modified alternating current bridge, operating on 3 volts and frequency of 10,000 cycles per second, is connected to the patient's arms by electrodes. The recorded curve corresponds with heart beats and is appreciably changed by cardiac abnormality.

Serums

Nonprostatic Adenocarcinoma

The return of serum acid phenylphosphatase to normal levels appears to enhance the survival of patients with disseminated nonprostatic adenocarcinomas. Among more than 60 persons with varied metastatic neoplasms, Dr. H. M. Lemon and associates of Boston University and the Robert Dawson Evans Memorial and Massachusetts Memorial hospitals, Boston, find that two-fifths had elevated phosphatase. The mortality among these 24 exceeded 75%, whereas only 42% of the subjects with persistently normal acid phenylphosphatase have died despite equally widely disseminated metastases. All survivors but 1 have shown a return to normal levels.

Proc. Am. A. Cancer Research 1:32-33,

Drugs

Adrenal Cortex for Asthma

Repeated administration of epinephrine to chronic asthmatic patients apparently does not impair adrenal cortical function. The drug loses the power to elicit adrenal response after prolonged therapy, but does not alter cortical reactions to other drugs. Dr. Alan Leslie and associates of the Veterans Administration Center and the University of California, Los Angeles, found normal eosinopenic and sweat salt response to ACTH injections in 5 epinephrine-treated patients. The ameliorative effect of epinephrine appears to be due to a direct bronchodilator action rather than to a reaction mediated through the hypothalamus-pituitary-adrenal cortex mechanism. No evidence of tolerance to the drug was observed, and temporary discontinuance did not enhance the antiasthmatic effect.

J. Lab. & Clin. Med. 41:865-870, 1953.



"The boss thinks there was only one. I'm saving the other for next week so I'll get off again!"

Now, new Donnatal form provides

DEPENDABLE SPASMOLYSIS plus Effective B-Complex Therapy

Product Name: Donnatal Plus

Characteristics: Combines spasmolytic and sedative

Clinical Aspects: Provides effective spasmulying therapy

factors. B vitamins stimulate appetite.

Help control castromtestmal side

A. H. ROBINS CO., INC. RICHMOND 20, VIRGINIA

Donnatal Tablets





*Usual daily dose

CURITY Adhesive is made for fast application <u>without</u> wrinkles

Smooth, fast, wrinkle-free taping is assured in Curity adhesive by a special cloth backing which reduces wrinkling . . . yet is *flexible* to permit you to work fast with sure, smooth results.

With the special backing of Curity adhesive, the risk of having to stop and re-tape to eliminate wrinkles is significantly reduced. And an improved adhesive mass gives *added* sticking quality.

See if you don't find Curity the easiest-handling, smoothest-working adhesive you have ever used.



Division of The Kendall Company







RESEARCH

New Research Laboratory of R. J. Reynolds Tobacco Company



The plant shown above, which was opened this year, is a \$2,000,000 addition to Camel's research facilities.



R. J. REYNOLDS TOBACCO COMPANY . WINSTON . SALEM . N. C.

Therapy Control of Hepatic Coma

Administration of glutamic acid appears to terminate or alleviate coma episodes in patients with subacute or chronic liver damage. The drug is intimately related to hepatic and cerebral metabolism and is active in the removal of excess ammonia. probably one of the toxic factors involved in hepatic coma. Dr. J. M. Walshe of the University College Hospital, London, administered 23 gm. of sodium glutamate intravenously over three to four hours in 5 instances of coma in 3 patients; rapidly consciousness returned. Tablets of 0.5 gm. sodium glutamate are taken orally and appear to be well tolerated in divided doses to total 20 gm. daily.

Lancet 264:1075-1077, 1953.

Tropical Medicine PABA and Malaria

Malarial infection is suppressed in animals maintained on a milk diet. Rats inoculated with Plasmodium berghei and fed a normal laboratory diet show a significantly greater percentage of parasitized erythrocytes than infected animals fed a milk diet. By adding a small amount of para-aminobenzoic acid to the milk diet, Dr. F. Hawking of the National Institute for Medical Research, London, was able to demonstrate a pronounced increase in degree of infection. Similar observations have been made in malaria-infected monkeys, suggesting that PABA or some derivative is an essential metabolite for the malarial parasite. The suppressive action of milk probably is due to low PABA content.

Brit. M. J. 4821:1201-1202, 1953.





Spurred by suggestions from the profession, DeVilbiss has now perfected the first successful pocket nebulizer which the patient may carry with him at all times and use at a moments notice.

Doctors had too often encountered patients who were inconvenienced by the lack of a nebulizer that could be safely carried in purse or pocketbook.

Leak proof, practically unbreakable. Provided with attractive carrying case. Weighs but an ounce and a half. Particle size and performance equal to that of regular nebulizers. Ask your pharmacist to show the new DeVilbiss No. 41 Pocket Nebulizer. \$5.00 retail.

DEVILBISS . ATOMIZERS NEBULIZERS VAPORIZERS

"The Line the Physician Knows and Prescribes"

Vitamins

Hypervitaminosis A Effects

The administration of excessive amounts of vitamin A to pregnant rats results in a diminished litter rate and congenital anomalies in the surviving offspring. Gross defects in the development of the skull and brain occurred in 54% of 74 offspring as compared to no deformities in 410 unexposed newborn rats, reports Dr. Sidney Q. Cohlan of New York University, New York City. Hypervitaminosis A from the second, third, or fourth to the sixteenth day of gestation reduced the normal successful pregnancy rate of 88 to 10%. Sporadic anomalies also noted were macroglossia, harelip, cleft palate, and gross defects in eye development. Science 117:535-536, 1953,

Neurology

Barbiturate Analgesic

Intradermal injections of Sodium Amytal give relief from local pain with deep tissue foci. The barbiturate appears to be equal or superior in effect to conventional local anesthetics and causes little or no tissue irritation, observes Dr. Francis Schiller of the University of California, San Francisco. A 4% isotonic solution in doses of 0.2 to 0.25 gm. adequately relieved painful trigger points in 14 of 15 patients. Doses exceeding 0.1 gm. will provide analgesia approximately thirty minutes before subsequent sedation is noticeable. However, large quantities of the drug would be required for extensive local anesthesia, as in surgical incisions, and would cause serious hypnotic effects.

Anesthesiology 14:321-332, 1953.

Surgery Preservation of Grafts

Properly freeze-dried aortic grafts are more satisfactory when used in dogs than homologous fresh tissue transplants or grafts preserved by other methods. Reduction in mortality and decrease in the incidence of thrombosis follow use of the freeze-dried grafts, report Drs. James W. Pate and Philip N. Sawver of the National Naval Medical Center, Bethesda, Md. Of 48 cases with preserved implants, 96% were classed as excellent, compared to 54.6% with fresh tissue grafts. Storage up to six months before implantation did not alter results. Tensile strength and elasticity of the grafts were adequate six months after transplantation.

Am. J. Surg. 86:3-13, 1953.

Dermatology

Prophylaxis of Poison Oak

Contact dermatitis caused by Rhus diversiloba, poison oak, may be largely prevented by application of a protective cream containing 4% zirconium hydrate and 2% Pyribenzamine. Among 906 soldiers exposed to the foliage, Drs. Richard E. Strauss and Carl R. Bruck of the U.S. Army Hospital, Camp Cooke, Calif., report that the incidence of the dermatitis was 21.1% in unprotected men, but only 9.6% when the medicament was used on the hands, forearms, face, and neck. In the treated group lesions appeared only in unmedicated areas, whereas in the untreated men eruptions were generalized. In vitro, the metallic element inactivates urushiol, the irritant principle of the Rhus family. J. Invest. Dermat. 20:411-413, 1953.

A new
medium-priced
vaporizer by

DEVILBISS



You can now prescribe for your patients a DeVilbiss Vaporizer to meet every need and purse

The new DeVilbiss No. 146
Vaporizer is designed to give the
utmost in service at a moderate
cost to the patient—\$7.50.
Steams continuously for 4 hours.
All metal, trouble-free construction. High rated steam out-put.
Fully approved by Underwriters
Laboratories—thermostatically
controlled. Wide tip-resistant
base. Remind your patients that
DeVilbiss, the most frequently
prescribed name in vaporizers,
now has a complete line for every
need and purse.

DEVILBISS - ATOMIZERS NEBULIZERS VAPORIZERS

"The Line the Physician Knows and Prescribes"

Our Office Nurse

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent \$5. The Oct. 15 winner is

M.M. Thompson, Jr., M.D. Toledo

Mail your caption to The Cartoon Editor Caption Contest No. 3

MODERN MEDICINE 84 South 10th St. Minneapolis 3, Minn.



"A 'circumscribed mass,' Miss Schultz-not a 'circumcised mess.' "

HEMORRHOIDS POST-HEMOR-RHOIDECTOMIES POST-EPISIO-TOMIES EXANTHEMAS ECZEMAS PRURITUS WOUNDS BURNS AMERICAINE AEROSOL Ideal topical anesthetic for office use

PROMPT RELIEF

FROM SURFACE PAIN AND ITCHING Via 20% Dissolved Benzocaine

Clinical studies show nothing relieves surface pain and itching like Americaine . . . because only Americaine contains 20% dissolved benzocaine... the first time such high concen-

tration has been achieved. Shown to be more effective1, quicker acting2, longer lasting³, least toxic⁴.

1. Tainter, M. L. & Winter, L.: Anesth. 5.470

5.470
2. White, C. & Madura, J.: Postgr.
Med., June, 1951
3. Schmitz, H. E. et al: West, J. Surg, &
Gyn., 59:117
4. Adriani, J.: Pharmacology of Anes-

thetic Drugs, 1941

Available in 1 oz. tubes and 1 lb. jars Send for samples and Literature

ARNAR-STONE LABORATORIES INC.

1316-J Sherman Ave., Evanston, III. In Canada: Brent Laboratories, Ltd., Toronto

TOPICAL ANESTHETIC OINTMENT

BULLETIN

Poisoning In Infancy From Standard OPIATE PREPARATIONS

Most states permit the sale of preparations containing one grain of codeine or 1/4 grain of morphine per ounce over the druggist's counter—without prescription or, at least, without a narcotic prescription. Such small dosages are not dangerous to adults and cannot be used with satisfaction by addicts. However, such medications have caused death in infants.

• Effects of opicite derivatives are directly related to weight. A

10-pound infant is only 1/15 of the weight of an average adult. A teaspoonful of a preparation containing 1/4 grain of morphine per ounce contains only 1/32 grain, but for a 10-pound infant, that is equivalent to 1/2 grain for an adult.

• These seemingly innocuous preparations have, in a number of cases, been given to infants repeatedly—every two or three hours—with fatal results. Although it may not be possible or desirable to change the law, every physician must realize that preparations which could be taken in large amounts by an adult can be extremely serious in an infant. Morphine and codeine dosages in infants should be calculated in each case for weight of infant.

NOTE: These bulletins are designed to help disseminate modern pediatrics knowledge to the general medical profession and will appear monthly in Modern Medicine.



HEINZ

OVER 50 VARIETIES - Strained Orange Juice, Pre-Cooked Cereals, Strained Foods, Junior Foods



Symbol Of Fine Quality Since 1869



Heinz Baby Foods And Heinz Baby Food Advertising Are Reviewed And Accepted By The Council On Foods And Nutrition. **Baby Foods**

You Know It's Good Because It's Heinz'

SHORT REPORTS

Pharmacology Congenital Megacolon

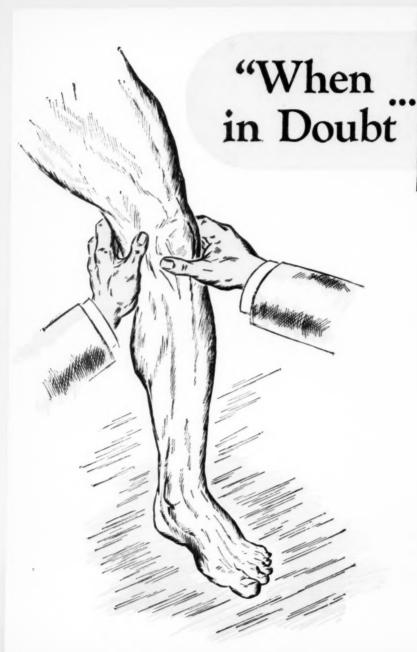
Anatomic abnormalities with congenital megacolon may consist principally of a central displacement of cholinergic neurons and a paucity or lack of adrenergic neurons of the myenteric plexus of the distal segment. Surgical specimens of both hypertrophied and spastic portions of the colon obtained from 5 patients with the congenital disease were compared by Dr. Kazuya Kamijo and associates of Columbia University, New York City. Lower thresholds of response to acetylcholine and lower specific and nonspecific cholinesterase activity resulted in the hypertrophied segments than in the spastic segments. In histochemical studies, the higher specific esterase activity of the spastic segment was associated with large numbers of nonmyelinated nerve fibers in the ganglion cell-free myenteric plexus. Lower nonspecific cholinesterase activity of the hypertrophied segment appeared to be the result of a thinning out of the muscularis mucosae and other regions where the enzyme is concentrated. Response to barium chloride was similar or identical in both types of segments and indicates direct action on the smooth muscle fibers of the human colon rather than on the ganglion cells. Diisopropyl fluorophosphate also affected both types of segments similarly.

Gastroenterology 24:173-184, 1953.



From the desk of R. A. SUTTER, M. D.





Think of Gout"

"Gout is not a rare disease," states Kauffmann¹, "as several hundred thousand people are suffering from this malady in the United States . . . Nevertheless, the diagnosis is very often missed and confused with other forms of arthritis. The easiest way to make a correct diagnosis is the therapeutic test with Colchicine, which will in most of the cases

relieve an acute attack of gouty arthritis . . ."

Like other investigators, he suggests maintenance doses of Colchicine as well as salicylates.

Of the use of salicylates, Gutman² states: "Adjuvant analgesics, particularly salicylates, are employed especially when residual stiffness of joints is present . . . As has long been known, salicylates effectively increase urinary uric acid excretion . . ."

CINBISAL*

-therapeutic and diagnostic in gouty arthritis-

EACH TABLET CINBISAL CONTAINS:

Colchicine (0.25 mg.)—for its specific effect in gouty arthritis.

Sodium Salicylate (0.3 Gm.)—to combat pain (and promote uricosuria).

Ascorbic Acid (15 mg.)—to replace vitamin C lost during salicylate therapy.

Useful as a uricosuric and analgesic in the management of gouty arthritis, acute articular rheumatism, and fibrositis and bursitis associated with chronic gouty states.

SUPPLIED: Bottles of 100 and 1000 tablets, (Engestic® coated green). Samples on request.

*Trade Mark

MCNEIL LABORATORIES, INC. Philadelphia 32, Pa.

1. Kauffmann, P.: American Prac. 2:146-150 (Feb.) 1951.

2. Gutman, A. B.: The Bulletin of the N. Y. Acad. M. 27:144-164 (March) 1951;

Enzymes

Prevention of Pancreatitis

Lipase inhibitors appear to delay or prevent fatal pancreatic necrosis in dogs. Drs. H. L. Popper and H. Necheles of the Michael Reese Hospital, Chicago, injected either quinine or sodium formaldehyde sulfoxylate intraperitoneally to dogs whose pancreatic ducts had been previously opened into the peritoneal cavities. Of the 13 dogs so treated, 8 remained in good health. and only 5 showed fat necrosis. Untreated animals succumbed in 85% of cases. Trypsin inhibitors appear to be ineffective in altering the necrotic process. Acute pancreatitis, pancreatic injuries, and prevention of postoperative pancreatitis may be affected clinically by lipase inhibitors.

Surgery 33:896-897, 1953.

Cancer Control Color Television Series

In 1953 and 1954 the American Cancer Society will produce 30 closed-circuit color television programs for general practitioners in Boston, Philadelphia, Pittsburgh, Detroit, Toledo, and New York City. A receiver will be set up in each city to accommodate 500 viewers. The one-hour programs, originating from the Columbia-Presbyterian Medical Center and the Memorial Center in New York City, will be broadcast on the Columbia Broadcasting System TV network. The first broadcast is tentatively set for October 21, 1953, at 5 P.M. Programs will be viewed on alternate Wednesdays until December 2, when weekly broadcasts will be initiated. The series will emphasize the importance of general practitioners in determining the outcome of cancer. Methods for diagnosing and treating early cancer and for analyzing results of the treatment will be demonstrated, and news of research advances will be reported.

Experimental Medicine

Diet and Vitamin B₁₂

Insufficient concentration of methionine in hypolipotropic diets fed young rats results in inadequate vitamin B₁₉ protection against kidnev lesions. Fatty livers and almost 100% incidence of hemorrhagic kidneys occurred in rats fed basal hypolipotropic diets containing 190 mg, of methionine and less than 0.7 mg. of choline per 100 gm. of diet, report Dr. C. H. Best and associates of the University of Toronto. Addition of vitamin B₁₂ to such diets had no effect on fat deposition, incidence of kidney lesions, or survival rate. With addition of subprotective doses of choline, the vitamin promoted growth but had no effect on kidney lesions or levels of liver lipids. However, with increased methionine content, vitamin B₁₂ doubled the rate of growth and reduced mortality and incidence and severity of the kidnev lesions. Older animals fed the same basal diet showed increased growth and some reduction of liver lipids when vitamin B₁₂ alone was added to the diet.

Canad. J. M. Sc. 31:135-145, 1953.



PHOTOGRAPH BY RUZZI GREEN

"My throat sure feels better"

TRACINETS.

BACITRACIN-TYROTHRICIN TROCHES WITH BENZOCAINE

ACTIONS AND USES: With TRACINETS you can readily relieve afebrile mouth and minor throat irritations in your young patients—and in older ones, too. Acting together, bacitracin and tyrothricin are truly synergistic. Soothing local relief is afforded by benzocaine.

In severe throat infections Tracinets Troches, by their local action, supplement antibiotic injections.

QUICK INFORMATION: Each TRACINETS Troche contains 50 units of bacitracin, 1 mg. of tyrothricin and 5 mg. of benzocaine. Available in vials of 12.

Biochemistry

Demerol Toxicity

Hot and cold environments corresponding to the seasons affect toxicity of Demerol. Single doses were given to golden hamsters at the University of Alabama, Birmingham, by Drs. Walter H. Johnson and Emmett B. Carmichael. During the summer, amounts lethal to 50% of animals varied from 160 to 190 mg. per kilogram. In a cool room simulating winter, with temperature about 15° F., the range was 220 to 250 mg.

Federation Proc. 12:227, 1953.

Therapy

ACTH for Erythroblastosis

Immunologic and hematologic improvement in erythroblastotic infants occurs after the administration of ACTH. Dr. Leo J. Geppert and associates of the Brooke Army Hospital, Fort Sam Houston, Tex., employ doses of 12.5 mg. immediately after delivery, followed by 6.25 mg. every six hours thereafter for approximately eight and onehalf days. Of 20 severely afflicted infants so treated, 17 survived and experienced a fall in eosinophil counts, reversal of the Coombs' test, and increases in 17-ketosteroids and 11-oxysteroids. Desensitization of red cells took place rapidly. Disappearance of erythroblasts and fall in eosinophils were apparent in three to four days. Red cell counts and hemoglobin determinations rise as treatment progresses, although hemolysis cannot be completely prevented. Termination of ACTH administration may result in reversals, with decrease in hemoglobin and erythrocytes and return of a positive Coombs' test, necessitating further courses of injections. Supportive therapy with antibiotics, Benadryl, and vitamins K and C is suggested for this condition.

Pediatrics 12:72-80, 1953.

Hematology

Blood Ammonia in Shock

Peripheral blood ammonia concentration in dogs is increased during oligemic shock. In the normal animal, ammonia is contributed to the circulating blood by the intestine and the kidney and is removed by the liver. During shock, the ammonia concentration from the intestine and kidney is increased and the liver does not adequately reduce the concentration in the hepatic vein blood, report Drs. Russell M. Nelson and David Seligson of Walter Reed Army Medical Center, Washington, D. C. In a group of 7 dogs with hypotension induced by blood loss, the increased concentration in the portal and renal veins and the inability of the liver to remove ammonia properly resulted in elevated levels of ammonia in the arterial blood. As the arterial ammonia rose, shock became deeper. The degree of elevation of ammonia observed in shock appears to be an aggravating factor in potentiating the pathophysiology of shock rather than a primary cause of death.

Surgery 34:1-8, 1953.

friendly in tas — tastes like chos pudding—readily children ... or ac friendly to norm flora—the type es to normal peristal Suppresses putrefa bacteria to obviate distressing flatulen friendly in effect — so gentle, no rush griping, strain or lea Lubricates, softens intestinal contents. Evacuations are mo comfortable

friendly in taste - tastes like chocolate pudding-readily taken by children . . . or adults.

friendly to normal aciduric flora - the type essential to normal peristalsis. Suppresses putrefactive distressing flatulence.

friendly in effectiveness - so gentle, no rush, no griping, strain or leakage. Evacuations are moist, comfortably passed.

Wide-mouth jars of 6 oz.

MED-CULTOL

friendly to the constipated colon

ngton chemical company itamin Corporation

Radiology

Potassium in Muscular Disease

Measurement of potassium distribution by means of radioactive K42 to determine total body exchangeable potassium aids in the early detection of muscular dystrophy and myotonia atrophica. Positive correlation exists for total exchangeable potassium, degree of muscular disability, and twenty-four-hour creatinine excretion, believe Dr. William H. Blahd and associates of the Veterans Administration Center and the University of California at Los Angeles. Patients with levels above 2,500 mEq. have little dysfunction. Levels between 1,800 and 2,500 mEq. indicate moderately advanced muscular wasting, and below 1,800 mEq., severe disability.

Neurology 3:604-608, 1953.

Endocrinology

Adrenal Function in Infants

Premature infants respond to adrenocorticotropic stimulus by a corresponding change in steroid production. As in normal adults, elevated steroid excretion was observed with ACTH therapy in 5 premature infants, reports Dr. Jonathan T. Lanman of New York University, New York City. Steroid excretion fell two to four days after discontinuance of treatment and was followed by a moderate rise in some cases, indicating that infant adrenals possess a functional reserve in the period of fetal zone involution. However, unlike normal adult response, sodium excretion in one infant increased during the

first sixteen days of the therapy, suggesting a reason for untoward effects of ACTH in some infants with hypoadrenalism. Ultimate retention of sodium in the infant occurred with continued therapy. Antepartum treatment with ACTH in a toxemic mother resulted in elevated steroid excretion of the infant, indicating passage of ACTH across the placental barrier. Normal postnatal urinary formaldehydogenic steroid output was observed in an infant born of a toxemic mother treated with cortisone, indicating failure of cortisone to cross the placenta.

Pediatrics 12:62-70, 1953.

Oncology

Antileukemic Drugs

Myeloid chloroleukemia in rats responds favorably to injections of a series of phosphoramide derivatives. Transplantation of leukemic rat cells results in rapid cancerous involvement and death of the recipient animal unless treatment is instituted as soon as the disease symptoms appear, report Sarah J. Sparks and associates of Pearl River, N. Y. Prompt remission of the disease occurs in all treated rats. but recurrences, followed by death, result after cessation of drug administration. The series of N-ethylene substituted phosphoramides are more effective than pteroylglutamic acid antagonists for this type of leukemia. Triethylenemelamine (TEM) is also antileukemic in the rats, but the new drugs are as effective, while less toxic.

Blood 8:655-660, 1953.

potency considered,

Multicebrin

is your patient's "best buy"
in the quality
multiple-vitamin market



GELSEALS

Multicebrin

(Pan-Vitamins, Lilly)

From where I sit by Joe Marsh An Honest Night's Sleep

Slim Johnson, just back from a business trip, tells about a hotel

he stayed at one night.

"I hit town late and went right to the hotel. There was no clerk at the desk, but there was a sign that said: 'Gone to bed. Rooms \$3. Take a key. Pay when you leave, Sleep Well.'

"Upstairs, the room was real clean, the bed comfortable and I slept like a log. Came down in the morning-still no clerk. So I left three dollars at the desk and went on. Can you imagine folks that trustful?"

From where I sit, running a hotel on the honor system shows a real trust in people. And people always appreciate being trusted. Letting the other fellow follow his profession without interference is one way of trusting your fellow citizens. So is your regard of my liking an occasional glass of beer. You may prefer buttermilk, but let's hope neither of us "register" a complaint against the other.

Joe Marsh

Copyright, 1953, United States Brewers Foundation

Cardiology

Vitamin Excretion

Thiamin deficiency in mercurialtreated cardiac patients appears to be a result of depressed tubular absorption of the vitamin. Urine studies of 9 patients with chronic congestive heart failure revealed high levels of thiamin excretion after mercurial administration, report Dr. Michael G. Wohl and associates of the Temple University, Philadelphia. Mercurial-induced thiamin excretion is not a function of increased urine volume, since urinary thiamin content does not correlate with urine output. Some patients with low urine output have higher levels of thiamin excretion than those with greater diuresis.

Proc. Soc. Exper. Biol. & Med. 83:323-325,

Toxicology

Sodium Chloride in Rats

Sustained arterial hypertension results in male albino rats fed diets rich in sodium chloride. A syndrome of edema and renal failure was observed in 18% of rats fed diets containing 7 to 9.8% of the salt, find Dr. George R. Meneely and associates of Thayer Veterans Administration Hospital and Vanderbilt University, Nashville, Tenn. Significant histologic changes in the kidneys and other organs occurred in these animals. High dietary sodium chloride also increased the relative volume of the radiosodium space. A positive linear correlation existed between systolic blood pressure and concentration of sodium chloride one year after the initiation of high-salt diets.

J. Exper. Med. 98:71-80, 1953.

Upjohn

oral
estrogen-progesterone
effective in
menstrual disturbances:

Each scored tablet contains:

Estrogenic Substances* .. 1 mg, (10,000 I.U.)

Progesterone 30 mg.

*Naturally occurring equine estrogens (consisting primarily of estrone, with small amounts of equilin and equilenin, and possible traces of estradiol) physiologically equivalent to 1 mg. of estrone.

Available in bottles of 15 tablets.

The Upjohn Company, Kalamazoo, Michigan



Cyclogesterin tablets



Nicotine Actually Bred Out Of The Leaf

John Alden cigarettes are made from a completely new, low-nicotine variety of tobacco. A comprehensive series of smoke tests*, completed in 1951 by Stillwell and Gladding, one of the country's leading independent laboratories, disclose the smoke of John Alden cigarettes contains:

At Least 75% Less Nicotine Than 2 **Leading Denicotinized Brands Tested** At Least 85% Less Nicotine than 4 Leading Popular Brands Tested At Least 85% Less Nicotine Than 2 Leading Filter-Tip Brands Tested

Amportance To Doctors And Patients

John Alden cigarettes offer a far more satisfactory solution to the problem of minimizing a cigarette smoker's nicotine intake than has ever been available before, short of a complete cessation of smoking. They provide the doctor with a means for reduc-ing to a marked degree the amount of nicotine absorbed by the patient without imposing on the patient the strain of breaking a pleasurable habit.

ABOUT THE NEW TOBACCO IN JOHN ALDEN CIGARETTES

John Alden cigarettes are made from a completely new variety of tobacco. This variety was developed after 15 years of research by the Kentucky Agricultural Experiment Station. Because of its extremely low nicotine content, it has been given a separate classification, 31-V. by the U. S. Dept. of Agriculture.



A summary of test results available on request.

Cardiology

Mobile Recorder

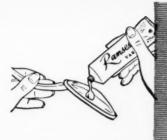
portable, specially-constructed electronic radio transmitter enables the recording of electroencephalograms and electrocardiograms under normal conditions. Designed by Dr. Cyril Stansfeld Parker and associates of Whittingham Hospital, London, the apparatus can be strapped to the patient for any test situation. The subject is mobile and free from restraints for all activities while the electrocardiogram or electroencephalogram is radiotransmitted to a receiver for conventional recording. In addition to such studies, the apparatus is applicable to any electrically-expressed physiologic phenomenon. Lancet 264:1285-1288, 1953.

Metabolism

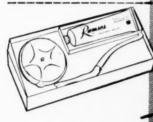
Diuresis with Dexedrine

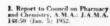
The early rapid weight loss in persons receiving Dexedrine may be a consequence of sodium and water wasting. Amphetamine (Benzedrine) and amphetamine isomers (Dexedrine and Levedrine), when administered to rats, produce an elevation of glomerular filtration rates by direct action upon renal circulation, report Dr. Leo A. Sapirstein and associates of the Ohio State University, Columbus, Starved, normal, and salt-loaded animals injected intraperitoneally with 1 mg. of amphetamine or d-amphetamine demonstrate water loss and increased sodium excretion during a three-hour metabolic period. L-amphetamine is slightly less effective but has considerable diuretic and natriuretic activity.

Proc. Soc. Exper. Biol. & Med. 82:609-612,









*Active ingredients, by weight: Dodcaethyleneglycol Monolaurate 5%; Boric Acid 1%; Alcohol 5%

Protection at its OPTIMUM

Clinicians of the widest experience in conception control continue to maintain that optimum protection is provided by the combined use of a correctly fitted occlusive diaphragm and a dependable spermatocidal jelly.¹

Physicians can give their patients the full benefit of this technic by prescribing the RAMSES Physician's Prescription Packet No. 501. Each set contains a RAMSES Vaginal Diaphragm of the prescribed size; a diaphragm introducer of corresponding size; and a regular (3-oz.) tube of RAMSES Vaginal Jelly.* The same components are also available in a plastic zippered case.

RAMSES Gynecological Products are offered for use only under the guidance of the physician.

amses°

PHYSICIAN'S PRESCRIPTION PACKET NO. 501

gynecological division

JULIUS SCHMID, INC.

423 West 55th Street, New York 19, N. Y.

quality first since 1883



Nellie Nifty, R.N.













sedation

KŪSED

KŪSED

KÜSED

KŪSED

KÜSED

DOSAGE:

SUPPLIED:





SHORT REPORTS

Ophthalmology

Plastic Corneal Implants

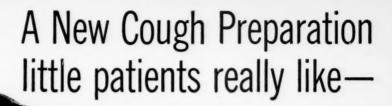
Fixation of artificial corneal implants in rabbits may be accomplished with interlamellar plastic molds fabricated at the periphery with mesh to permit firm ingrowth of corneal tissue. Tissues are kept in apposition to the peripheral mesh by sutures long enough for firm growth into the interstices of the meshwork. Dr. William Stone, Jr., and Elizabeth Herbert of the Massachusetts Eye and Ear Infirmary and Massachusetts General Hospital, Boston, explain that the use of plastic material for implants was suggested by the observation during World War II that fragments of plastic cockpit cupolas

embedded in bomber pilots' eyes produced little if any reaction. Implants of annealed methyl methacrylate placed in 1 eve of each of 9 rabbits two years ago have caused little reaction. However, 2 implants extruded at the end of nineteen months. The operative procedure consists of incising the cornea at the limbus, splitting the cornea in 2 layers from limbus to limbus, sliding the implant between the 2 layers, and suturing the cornea in the periphery. An incompletely covered interlamellar disk remained in place in 1 rabbit cornea until the natural death of the animal in a year. An operative method has been devised for producing the partially covered implant.

Am. J. Ophth. 36:168-173, 1953.



230 MODERN MEDICINE, October 15, 1953



(and its high gastric tolerance repays their confidence!)

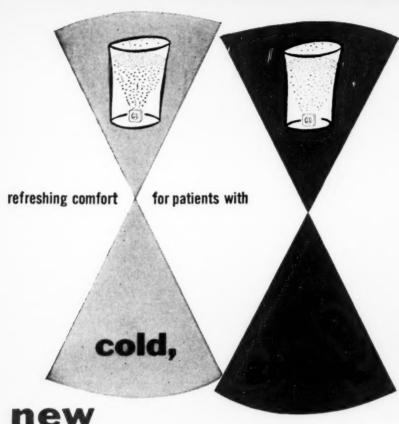
Vicks Medi-trating Cough Syrup is a new non-narcotic cough mixture with specialized characteristics designed to produce relief of coughs of colds by two mechanisms. It works direct by coating and soothing the irritated membranes to relieve coughs originating in the throat area. Containing Cetamium (Vick brand of cetylpyridinium chloride), the mixture has increased spreading and penetrating properties which enhance its local antitussive action.

Containing two effective expectorants—ammonium chloride and sodium citrate—it produces rapid non-irritating action. It has a high degree of gastric tolerance and palatability which makes it acceptable to both adults and children.

Active Ingredients: Sodium Citrate, Ammonium Chloride, Glycerin, Cetamium (Vick brand of cetylpyridinium chloride) in a pleasantly flavored syrup containing Eucalyptus, Menthol, Camphor, and other Vick aromatics.

VICKS
MEDI-TRATING
COUGH
SYRUP

Made by the makers of Vicks VapoRub



new

APAMIDE-VES

(Buffered N-acetyl-p-aminophenol, Ames)

Note: Apamide-Ves offers your arthritic and rheumatic patients a pleasant, extremely effective, new analgesic. It is especially useful for those intolerant to salicylates.

Average Dosage: Adults-1 or 2 tablets in glass of water every four hours; to be taken after tablet dissolves and while solution is bubbling. Not to exceed 10 tablets in 24 hours. Children over 5-1/2 or 1 tablet in glass of water every four hours; not to exceed 4 tablets in 24 hours.



more rapid action: ready for absorption immediately; buffering agents hasten passage to point of absorption* assured fluid intake: combats dehydration, encourages excretion protective alkaline factor: also safeguards those taking sulfonamides well-tolerated: notably free from side effects more palatable: readily accepted by children and adults averse

safer control ⋅ R₂ only

Availability: Apamide-Ves Tablets: Effervescing analgesic-antipyretic; N-acetyl-p-aminophenol, 0.3 Gm., in Citrate-Carbonate Base, q.s. Box of 50, individually foil-wrapped.

Samples and literature upon request.

Apamide-Ves, trademark.

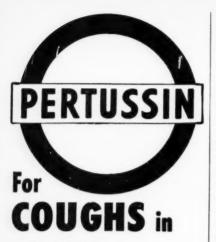
to tablets and capsules

*Lolli, G., and Smith, R.: New England J. Med. 235:80 (July 18) 1946.



COMPANY, INC . ELKHART, INDIANA Ames Company of Canada, Ltd., Toronto

51753



- BRONCHITIS
- PAROXYSMS of BRONCHIAL ASTHMA
- WHOOPING COUGH
- CATARRHAL COUGHS
- SMOKER'S COUGH

PERTUSSIN acts as an expectorant and antispasmodic in coughs not due to organic disease. It increases natural secretions to soothe dry irritated membranes. Well tolerated by both children and adults. Pleasant to take and entirely free from narcotics or harmful ingredients.

SEECK & KADE, Inc. New York 13, N. Y. Endocrinology

Slight Myxedema

Differential diagnosis of doubtful cases of thyroid malfunction may be aided more by the analysis of lipid metabolism than by determination of basal metabolic rate. In 13 cases of myxedema, Drs. Hagvin Malmros and Bengt Swahn of University Hospital, Lund, Sweden, found elevated levels of serum cholesterol, total lipids, and phospholipids. The β fraction of lipids, measured by electrophoresis, was increased as in familial hypercholesterolemia. Therapy with thyroid extract readily controlled the abnormal lipid levels.

Acta med. Scandinav. 145:361-369, 1953.

Therapy

Macrodex for Burns

Satisfactory correction of the early stage of burn shock and of depleted blood volume is obtained by intravenous injections of Macrodex, a brand of dextran. The plasma volume expander was substituted for human plasma in 8 severely burned patients treated at the Mayo Clinic, Rochester, Minn. Dr. Edward V. Johnston and associates recommend infusion of a 6% solution in 0.9% saline during the shock phase, in conjunction with whole blood administration. Oral protein supplements, electrolytes, and other noncolloids should be given when possible. Reversible changes in the proximal and distal convoluted tubules due to Macrodex were seen post mortem. However, no untoward reactions or complications attributable to the colloid therapy resulted.

Am. J. Surg. 85:720-728, 1953.

Clay-Adams Announces

The ADAMS Fertility Calculator



set indicator at "O'; pull collar to right, exposing the two wheels.





2. Shortest and longest cycles are set opposite each other—relock calculator by sliding collar back in place, with line over individual cycle variations.



3. Fertile period is read directly when indicator is set at date of menstrual onset.

- Simplifies your patient's calculation of her fertile period
- Permits individualized settings for each patient based on Knaus Method
- Eliminates arithmetical errors

The ADAMS Fertility Calculator enables a doctor, for the first time, to provide his patients with an easy-to-use, individually-set calculator that will accurately determine the individual patient's fertile periods. Based on the widely-approved and tested Knaus Rhythm method, it covers menstrual cycles as short as 21 days or as long as 38 days. It will cover up to 12-day variations in extremes of the patient's menstrual cycles.

The Fertility Calculator eliminates complicated charts and tables for determining a woman's fertile period. The doctor sets the calculator at the shortest and longest menstrual cycle of the patient and locks the calculator in position. The patient then can read her fertile days each month directly off the calculator, by turning the dial to her onset date of her latest menstruation. In sterility cases, the physician can narrow down the number of days when conception is possible.

Studies show that involved calculations are the greatest single source of error in applying the Knaus method. These are now avoided.

The ADAMS Fertility Calculator is made of durable plastic and metal and is only 2 inches high. The calculator will be sold only through Surgical Supply Dealers on recommendation of physicians. Price is \$5.00 with quantity discounts.

Get complete details from your Surgical Supply Dealer.

CLAY-ADAMS COMPANY, INC. 141 East 25th St., New York 10

Clay-Adams

CURRENT

BOOKS and PAMPHLETS

This catalogue is compiled from all available sources, American and foreign, to insure a complete listing of the month's releases.

Medicine

WHAT THE GENERAL PRACTITIONER OUGHT TO KNOW ABOUT HUMAN ACTI-NOMYCOSIS by V. Zachary Cope. 80 pp., ill. William Heinemann Medical Books, London. 12s. 6d.

ENDOCRINE TREATMENT IN GENERAL PRACTICE edited by Maximilian A. Goldzieher and Joseph W. Goldzieher. 474 pp., ill. Springer Publishing Co., New York City. \$8

Surgery

MIRACLES OF SURGERY by Jean Eparvier; translated by Ann Lindsay. 168 pp. Elek Books, London. 12s. 6d.; W. B. Saunders Co., Philadelphia. \$3.25

SURGICAL CARE: A HANDBOOK OF PRE-OPERATIVE AND POST-OPERATIVE TREATMENT by Ronald W. Raven. 2d ed. 435 pp., ill. Butterworth & Co., London. 37s. 6d.



Sharpness... Rigidity... Strength...

SHARP Micrometrically uniform sharpness throughout entire length of cutting edge. Correctly ground and honed cutting edge insures easier incisal penetration.

RIGID Scientifically controlled by the handle blade-lock.

Full compensation for lateral pressure needs of surgical procedures.

STRONG Superior surgical steel produced by exclusive A.S.R. processes supply unusual strength to "Command Edge" blades. These blades have keener, longer lasting edges. They meet all exacting surgical performance requirements. ORDER TODAY
Through

your dealer

AMERICAN SAFETY RAZOR CORPORATION

315 JAY STREET BROOKLYN 1, N.Y.

CLINICAL EVALUATION FREQUENTLY FAVORS BUTAZOLIDIN®

(brand of phenylbutazone)

In antiarthritic potency, BUTAZOLIDIN can be compared only with gold, ACTH and cortisone. In making a choice between these agents, the specific advantages of BUTAZOLIDIN merit consideration:

- Simple oral administration
- Potent and prompt antiarthritic effect
- Broad spectrum of action embracing many forms of arthritis
- No development of tolerance requiring progressively increasing dosage
 - No disturbance of normal hormonal balance
 - Moderate in cost

As with any agent so potent as BUTAZOLIDIN, optimal therapeutic results with minimal risk of side reactions can only be obtained by clinical management based on careful selection of patients, proper regulation of dosage, and regular observation of each patient.

Detailed Literature on Request.

BUTAZOLIDIN® (brand of phenylbutazone) Tablets of 100 mg.

GEIGY PHARMACEUTICALS



Division of Geigy Company, Inc. 220 Church Street, New York 13, N.Y. In Canada: Geigy (Canada) Limited, Montreal

ONLY THE BEST METHOD OF CONTRACEPTION IS GOOD ENOUGH!



There is no such thing as a "slight touch of pregnancy." When pregnancy is contraindicated only the best method of contraception is good enough.

A recent A.M.A. report stated, "For greatest protection, diaphragms and caps should be reinforced by a spermicidal jelly or cream."

The Lanteen Technique of contraception combines the barrier effect of the Lanteen Diaphragm with the potent spermicidal action of Lanteen Jelly.

¹Report to the Council, J.A.M.A., 148:50, (Jan. 5) 1952.

Lanteen Jelly contains: Ricinoleic Acid 0.50%, Hexylresorcinol 0.10%, Chlorothymol 0.0077%, Sodium Benzoate and Glycerin in a Tragacanth Base.

For descriptive literature and full information write to:

GEORGE A. BREON & COMPANY

Distributors
1450 BROADWAY, NEW YORK 18, N. Y.



Child Psychiatry

THE PSYCHOANALYTIC STUDY OF THE CHILD edited by Ruth S. Eissler et al. International Universities Press, New York City. \$7.50

CHILDREN IN PLAY THERAPY by Clark E. Moustakas. 218 pp. McGraw-Hill Book Co., New York City. \$4.50

Blood

B-VITAMINS FOR BLOOD FORMATION by Thomas H. Jukes. 125 pp., ill. Charles C Thomas, Springfield, Ill. \$4

YOUR BLOOD AND YOU by Sara R. Riedman. 130 pp., ill. Henry Schuman, New York City. \$2.50

THE RHESUS FACTOR by G. Fulton Roberts. 3d ed. 90 pp., ill. William Heinemann Medical Books, London. 5s.

Medical Profession

ARE THESE OUR DOCTORS? by Evelyn Barkins. 192 pp. Frederick Fell, New York City. \$2.50 PUBLIC RELATIONS by Edward L. Ber-

PUBLIC RELATIONS by Edward L. Bernays. 374 pp. University of Oklahoma Press, Norman. \$5

YOU AND YOUR DOCTOR: A GUIDE TO MODERN MEDICINE, SHOWING YOU HOW TO BE A GOOD DOCTOR'S GOOD PATIENT by Martin Gumpert. 258 pp. Bobbs-Merrill & Co., Indianapolis. \$3

PRINCIPLES OF MEDICAL ETHICS by John Paulinus Kenny. 208 pp. Newman Press, Westminster, Md.

CAREERS IN MEDICINE edited by P. O. Williams. 265 pp. Hodder & Stoughton, London. 15s.

Alcoholism

ALCOHOL EDUCATION: A GUIDE-BOOK FOR TEACHERS by Joseph Hirsh and Selma G. Hirsh. 107 pp. Henry Schuman, New York City. \$2.50

ALCOHOL, CULTURE AND SOCIETY by Clarence H. Patrick. 176 pp. Duke University Press, Durham, N. C. \$3

for all ages



Taste Toppers . . . that's what physicians and patients alike call these two favorite dosage forms of Terramycin because of their unsurpassed good taste. They're nonalcoholic - a treat for patients of all ages, with their pleasant raspberry taste. And they're often the dosage forms of first choice for infants, children and adults of all ages.

erramycin



Pediatric Drops

Each cc. contains 100 mg. of pure crystalline Terramycin. In 10 cc. bottles with special dropper calibrated at 25 mg, and 50 mg. May be administered directly or mixed with nonacidulated foods and liquids, Economical 1.0 gram size often provides the total dose required for treatment of infections of average severity in infants.

Supplied: Bottles of 1.0 Gm.



Oral Suspension (Flavored)

Each 5 cc. teaspoonful contains 250 mg. of pure crystalline Terramycin, Effective against gram-positive and gram-negative bacteria, including the important coli-aerogenes group, rickettsiae, certain large viruses and protozoa.

Supplied: Bottles of 1.5 Gm.



PFIZER LABORATORIES, Brooklyn 6, N. Y., Division, Chas. Pfizer & Co., Inc.



STOP

useless cough . . . write

Mercodol c Decapryn

Stops the tiresome, wracking cough, but does not interfere with the cough reflex. Mercodol with Decapryn controls cough by these important actions: 1. Antitussive 2. Bronchodilator 3. Expectorant 4. Antihistamine for added relief of the allergic cough. You'll see several coughing patients this week. Prescribe the cough syrup that really works and tastes good. Write Mercodol with Decapryn. One teaspoonful every 3-4 hours.

Mercodol c Decapryn

(for relief of the allergic cough)

Mercodol (Plain)

(Triple-action antitussive also available)
PIONEER IN MEDICINE FOR 125 YEARS

Merrell

New York CINCINNATI St. Thomas, Ont.
Trademark 'Decapryn' Mercodol®

Speech Correction

UNDERSTANDING STUTTERING by A. B. Gottlober. 274 pp., ill. Grune & Stratton, New York City. \$5.50

SPEECH TRAINING: A HANDBOOK FOR STUDENTS by Albert Musgrave Horner. 176 pp., ill. Philosophical Library, Inc., New York City. \$3.75

DIAGNOSTIC MANUAL IN SPEECH COR-RECTION: A PROFESSIONAL TRAINING WORKBOOK by Wendell Johnson et al. 221 pp., Loose-leaf. Harper & Bros., New York City. \$2.50

RESIDENTIAL SPEECH THERAPY: A RECORD OF THE WORK . . . AT MOORE HOUSE SCHOOL edited by C. Worster-Drought. 150 pp., ill. William Heinemann Medical Books, London. 15s.

Pharmacology

THE OFFICIAL PREPARATIONS OF PHAR-MACY by Charles Oren Lee. 2d ed. 544 pp., ill. C. V. Mosby Co., St. Louis. \$5.50

SIDE EFFECTS OF DRUGS by L. Meyler. 267 pp. Elsevier Press, Houston. \$5,50

Neuroanatomy

FUNCTIONAL NEUROANATOMY by Wendell J. S. Krieg. 2d ed. 659 pp., ill. Blakiston Co., New York City. \$9
THE ANATOMY OF THE NERVOUS SYS-

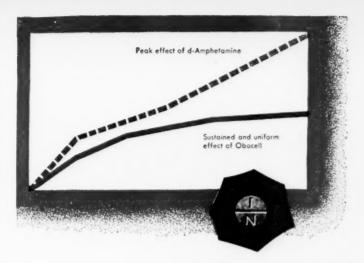
THE ANATOMY OF THE NERVOUS SYSTEM by Stephen W. Ranson and Sam L. Clark. 9th ed. 581 pp., ill. W. B. Saunders Co., Philadelphia. \$8.50

THE PRINCIPAL NERVOUS PATHWAYS: NEUROLOGICAL CHARTS AND SCHEMAS by Andrew T. Rasmussen. 4th ed. 73 pp., ill. Macmillan Co., New York City. \$4.50

Hospitals

THIS HOSPITAL BUSINESS OF OURS by Raymond Paton Sloan. 331 pp., ill. C. P. Putnam's Sons, New York City. \$4.50

by Howard W. C. Vines. 188 pp., ill. Faber & Faber, London. 30s.





Each OBOCELL tablet contains: Dextro-Amphetamine Phosphate 5 mg. Dosage: 3 to 6 tablets daily with a full

glass of water, one hour before meals. Supplied: Bottles of 100, 500, 1000 tab-

Firmin-Neisler's Brand of High Viscosity Methylcellulose.

HELPS KEEP THE PATIENT ON A DIET LONGER ...

Obocell controls the two causes responsible for overeating-bulk hunger and appetite.

Obocell provides a rapid initial release of d-Amphetamine to control appetite at meals, plus a prolonged action for the period between meals.

Nicel*, a new high viscosity methylcellulose in Obocell, provides non-nutritive bulk residue to dispel the gnawing sense of emptiness that impels the obese patient to violate his diet. Nicel, moreover, is responsible for the sustained and uniform effect obtained with Obocell, and prevents overstimulation and impairment of sleep as a result of the uniform absorption of d-Amphetamine.

With Obocell it is thus easy to attain and maintain patient co-operation during the trying period of weight reduction.

Obocell-

DOUBLES THE POWER TO RESIST FOOD At Meals and Between Meals

IRWIN, NEISLER & COMPANY DECATUR, ILLINOIS

Research to Serve Your Practice



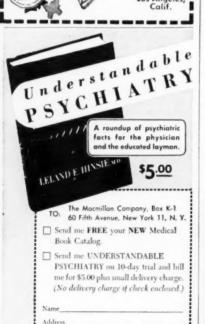
"cold compress action" teether

RELIEVES BABY'S TEETHING PAIN



Write today to
W.A. GENESY & CO.
828 So. Los
Angeles St.

Los Angeles,



City. Zone. State

Allergy

ALLERGY AND SEBORRHEA: COMPARATIVE STUDY OF THE SEBORRHOEIC AND ALLERGIC STATES by J. Avit-Scott. 100 pp. H. K. Lewis & Co., London, 12s. 6d.

A MANUAL OF CLINICAL ALLERGY by John McFarland Sheldon et al. 413 pp., ill. W. B. Saunders Co., Philadelphia. \$8.50

Medical Terminology

MEDIZINISCHE TERMINOLOGIE by Herbert Volkmann; edited by Kurt Hoffmann. 35th ed. 565 pp., ill. Urban & Schwarzenberg, Munich. 28 DM.

BIOLOGY AND LANGUAGE: AN INTRO-DUCTION TO THE METHODOLOGY OF THE BIOLOGICAL SCIENCES INCLUD-ING MEDICINE by J. H. Woodger. 364 pp. Cambridge University Press, London. 40s.; New York City. \$8

Sex Hygiene

ATTAINING MANHOOD; A DOCTOR TALKS TO BOYS ABOUT SEX by George Washington Corner. 2d ed. 97 pp., ill. Harper & Bros., New York City. \$1.50

ATTAINING WOMANHOOD; A DOCTOR TALKS TO GIRLS ABOUT SEX by George Washington Corner. 2d ed. 112 pp., ill. Harper & Bros., New York City. \$1.50





Enriched bread, representing the bulk of bread consumed today, makes significant nutrient contributions to the dietary and to the nutritional health of the American people.¹ Bread cannot be regarded merely as an energy food. Instead, it is an important purveyor of many nutrients which a large proportion of our population would never receive in adequate amounts if enriched bread were not available on so large and wide a scale.² Here is what modern day enriched bread provides:

VITAMINS: Containing specified amounts of thiamine, riboflavin, and niacin, enriched bread makes a significant contribution to the satisfaction of these vitamin requirements. Enriched bread has played an important role in virtually eliminating frank deficiency diseases and materially reducing subclinical deficiency states resulting from dietary inadequacies in these essentials.²

MINERALS: By providing substantial amounts of calcium³ and of added iron, modern enriched bread goes far in satis-

fying the needs for these substances. For example, six ounces of bread on the average provides approximately 15 per cent of the day's recommended calcium allowance for adults and 38 per cent of the iron allowance.

PROTEIN: The protein of commercial bread is of high biologic value because it is a mixture of wheat flour protein and milk protein, the latter derived from added nonfat milk solids. One pound of enriched bread furnishes about 39 Gm. of protein.

FCONOMY: At its present day low price, bread represents an outstanding nutritional "buy." It provides not only generous amounts of essential nutrients, but also readily available food energy. These features truly make enriched bread one of America's basic foods.



The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

REFERENCES

Sebrell, W. H., Jr.: Trends and Needs in Nutrition, J.A.M.A. 152:42 (May 2) 1953.
 Flour and Bread Enrichment, 1949-50: Prepared by The Committee on Cereals, Food and Nutrition Board, National Research Council, 1950.

3. Data furnished by the Laboratories of the American Institute of Baking, Chicago, Illinois. 4. Sherman, H. C.: Chemistry of Food and Nutrition, ed. 8. New York, The Macmillan Company, 1952, pp. 212; 597-600; 646.

AMERICAN BAKERS ASSOCIATION
20 NORTH WACKER DRIVE • CHICAGO 6, ILLINOIS



Here is the newest edition of Modern Medicine Annual—the book hundreds of doctors, universities and medical libraries say is the most widely used of the medical books being published currently. And the 1954 edition will be the largest, most complete volume we have ever published. It will comprise 1,540 pages containing every article that appeared in the 24 issues of Modern Medicine during 1953.

HERE IS WHAT YOU WILL GET

- * 1,540 pages
- * 75 Special articles and exhibits including 8 Symposia
- * 967 Abstracts by 1840 authors
- * 364 Illustrations
- * 24 Diagnostix
- * 5,316 Index entries (listed by authors and by subjects)

Beautifully printed and handsomely bound

Use the Reservation Card on the Front Cover

The cost of publishing this huge volume is so great we are forced to limit our print order to the number reserved by subscribers. We urge you to send in the reservation card now to make sure you won't be among the hundreds who are disappointed annually because their orders arrive too late.

SEND NO MONEY NOW

The reservation card will insure that your copy will be mailed on publication early in 1954. And it will come to you at the Special Pre-publication Price of just \$6.00 instead of the regular price of \$7.50.

The World of Medicine in Front of You

If you have little time to read the books, magazines and papers describing the latest medical developments you will find the 1954 Annual is just about the most helpful book in your library. Here you will find all the new technics and procedures, new methods of diagnosis and the latest therapeutic measures and the drugs to make them work. Here are the most important advances in all branches of medicine from world-wide sources.

All articles are brief, clear and easily grasped. And the entire contents are double indexed so you can find diseases, symptoms, procedures, tests; in fact any subject or any author in a matter of seconds.

Edited by the Greatest Medical Editorial Team in the World

Every article has been written and edited under the direction of Modern Medicine's Editorial Board. These 74 distinguished medical educators and physicians, headed by Dr. Walter C. Alvarez, are generally conceded to be the greatest editorial team in medical publishing history.

Mail Your Reservation Card Today . . . Save \$1.50 REMEMBER: You cannot buy the 1954 Annual without reserving a copy. It will not be available from any store or dealer.



When your copy arrives early in 1954, if you are willing to part with it after thorough examination, you may return it within 10 days and your bill will be cancelled.

MODERN MEDICINE

The Journal of Diagnosis and Treatment 84 South 10th Street, Minneapolis 3, Minnesota

Also publishers of Journal-Lancet, Geriatrics, Neurology In Canada: Modern Medicine of Canada

75%-85% Response PSORIASIS

NEW SORSIS TWIN CREAMS DUAL PHASE TREATMENT

SORSIS ALPHA—A softening cream to aid removal of scales. Contains: Ammoniated mercury, salicylic acid, phenol, tar.

SORSIS BETA—Stimulating cream to aid healing of lesions. Contains: Ammoniated mercury, ichthammol, tar, boric acid in new, non-lipoidal, non-screening base.

Send for Literature

AR-EX COSMETICS, INC., Pharm. Div. 1036-M W. Van Buren St., Chicago 7, III.

New Approach to Treatment and Control ot Psoriasis

SORSIS

TWIM CREAMS





Dr. Scholl's Arch Supports Usually Give Quick Relief

The reason quick relief usually follows when Dr. Scholl's Arch Supports are fitted to persons suffering from Weak, Fallen Arch or Flatfoot, is because the muscular and ligamentous strain causing the pain is removed. Expertly fitted at selected Shoe and Department Stores and Dr. Scholl's Foot Comfort® Shops in principal cities.

DE Scholl's SUPPORTS

Patients... I have met

The editors will pay \$1 for each story published. No contributions will be returned. Send your experiences to the Patients I Have Met Editor, MODERN MEDICINE, 84 South Tenth St., Minneapolis 3, Minn.

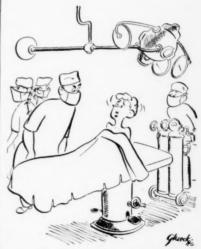
Professional Amateur

My patient was the "beautiful but dumb" type so I was trying to explain her symptoms in the simplest possible terms.

"Oh, that's all right, Doctor," she interrupted brightly. "You can be as technical as you like. I've just completed a first-aid course."—J.B.S.

Child's Logic

I was taking the blood pressure of an expectant mother when her fouryear-old son exclaimed, "Now I know why Mama is getting so big. You pump her up."—T.B.



"I've changed my mind!"

Le

V

at

ph

A New Standard of Performance in

Trichomonas Vaginitis

VAGISOL

Relief of pruritus and pain in a matter of days, rapid disappearance of the typical discharge, and an unusually high cure rate—these are the features which characterize the clinical performance of Vagisol in trichomonas vaginitis. In a carefully controlled study, it was shown that Vagisol

- Leads to complete symptomatic relief in 2.15 mean patient days;
- Is effective in all age groups, from 10 to 80;
- Produces a culture-demonstrable cure in 18 days in 72°, of the patients treated; 94°, are cured in 36 days, 98°, in 54 days. These results were dramatically superior to those seen with the control medication.

Therapy is simple; the patient is instructed to insert one Vagisol suppository deep in vagina twice daily.



Odorless and stainless, each Vagisol suppository contains:

Phenylmer	c	v	ri	c					
Acetate.								3.0	mg.
Tyrothricin								0.5	mg.
Succinic A	ci	ľ	ı,					12.5	mg.
Sodium La	u	á	1	ı					
Sulfate								3.0	mg.
Papain								25.0	mg.
									-

Vagisal suppositories are available on prescription through all pharmacies in bottles of 36, an average course of therapy for most patients.

A DORSEY PREPARATION

*Shaw, H.N.; Henriksen, E.; Kessel, J.F.; and Thompson, C.F.: Clinical and Laboratory Evaluation of "Vagisal" in the Treatment of Trichomoras Vaginalis Vaginitis, Western J. of Surg., Obst. & Gynec. 60:563 (Nov.) 1952.

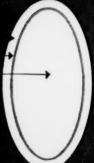
SMITH-DORSEY • Lincoln, Nebraska



ILOTYCIN-SULFA

Therapeutic Construction

therapeutic Dosage



ILOTYCIN (ERYTHROMYCIN, LILLY), CRYSTALLINE,

TABLETS-100 or 200 mg. per tablet.

Dosage: 200 mg. every four to six hours.

ILOTYCIN-SULFA TABLETS-50 mg, 'Tlotycin' plus 0.33 Gm. mixed sulfonamides* per tablet. Dosage: 3 tablets four times daily.

ILOTYCIN, ETHYL CARBONATE, CRYSTALLINE, PEDIATRIC-Taste-Tested by Junior Panel-100 mg. 'Ilotycin'

per teaspoonful (5 cc.). Dosage: Thirty-pound child, 1 teaspoonful every six hours; others, in proportion to weight. In 60-cc. bottles.

THE ILOTYCIN-SULFA, FOR ORAL SUSPENSION—Taste-Tested by Junior Panel - 100 mg. Tlotycin' plus 0.5 Gm. mixed sulfonamides* per teaspoonful (5 cc.). Dosage: Thirty-pound child,

I teaspoonful every six hours; others, in proportion to weight. In 60-cc. bottles.

ILOTYCIN, CRYSTALLINE, OINTMENT-10 mg. per Gm; Dosage: Apply to the affected area three or four times daily. In 1/2-ounce tubes.

* Equal parts of sulfadiazine, sulfamerazine, and sulfamethazine,



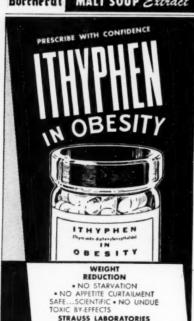
two tablespoonfuls in day's formula - or in water for breast fed babies - produce marked change in stool. Send for samples. BORCHERDT MALT EXTRACT CO.

217 N. Wolcott Ave. Chicago 12, III.

Borcherdt MALT SOUP Extract



Borcherat MALT SOUP Extract





Dire Complaint

After my patient had diagnosed her illness, I said, "You couldn't possibly know if you have that disease because it carries with it no discomfort.

"But, Doctor," she protested, "that's exactly how I feel."-W.L.H.

Cut and Draw

Hoping to get rid of a chronic complainer, I said, "I'll examine you for \$25."

"Go ahead," was the reply. "If you find it I'll split it with you."-B.P.S.



"Of course you're probably right, Doctor, but you don't mind my checking it, do you?"

X marks three reasons why . . .

TAMOST Periodic AbsenteeismX TAMODA Company Popular Activities X TAMODA Company Popular Activities X TAMODA Company Popular Acceptance X

THE INTRAVAGINAL MENSTRUAL GUARD OF CHOICE

COMPORTABLE — physically and psychologically COMPENIENT — easy to use, with individual applicators

SAFE - eliminates odor and irritation

TAMPASSURAN SSURAN SSUR

TAMPAX INCORPORATED . PALMER, MASS.
ACCEPTED FOR ADVERTISING IN JOURNALS
OF THE AMERICAN MEDICAL ASSOCIATION

Regular, Super, and Junior MM-15-103 Why risk sensitization or resistant organisms by using systemic antibiotics for intranasal application?

Violent sensitization following parenteral administration of a widely used systemic antibiotic, which is also available in nosedrop form. Painted by medical illustrator Paul Peck from actual case.



'DRILITOL'—S.K.F.'s dual antibiotic intranasal preparation—obviates fear of sensitization or resistant organisms to widely used systemic antibiotics.

WITH 'DRILITOL', there is no danger of sensitizing the patient to—nor of developing in him organisms resistant to—penicillin or the "mycins", which are so frequently used systemically in serious infections.

'DRILITOL' contains two effective antibiotics that are not in wide-spread systemic use.

In combination, these antibiotics—anti-grampositive gramicidin and anti-gramnegative polymyxin—actually potentiate each other. This important phenomenon results in an enhanced antibiotic action that attacks the wide spectrum of bacteria commonly found in intranasal infections.

'DRILITOL' also contains the effective decongestant, Paredrine† Hydrobromide, and the antihistaminic, thenylpyramine hydrochloride.

for intranasal infections specify:

Drilitol* Solution or'Drilitol Spraypak'

Smith, Kline & French Laboratories, Phila.

†T.M. Reg. U.S. Pat. Off. for hydroxyamphetamine hydrobromide, S.K.F. *T.M. Reg. U.S. Pat. Off. 'Spraypak' Trademark

INDEX TO ADVERTISERS

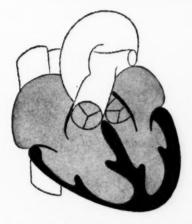
Abbott Laboratories 43, 66-67, 162-163, 172-173, 256 Alden, John, Tobacco Co	Macmillan Co., The 242 McNeil Laboratories, Inc. 6-7, 216-217 Maltbie Laboratories, Inc. 57 Massengill, S. E. 61 Mead Johnson & Co. 36, 191 Merrell, Wm. S., Co., The 2nd cover, 144-145, 240 Modern Medicine Annual 244-245
American Eysoscope Makers, Inc. 167 American Ferment Co., The. 151 American Optical Co. 42 American Safety Razor Corp. 236 Ames Co., Inc. 232-233	National Drug Co., The
Ar-Ex Cosmetics, Inc	Ortho Pharmaceutical Corp. between 192-193 Parke, Davis & Co
Ayerst, McKenna & Harrison Ltd143 Bauer & Black206-207 Baxter Laboratories (American Hospital	Patch, E. L., Co., The. 187 Pelton & Crane Co., The. 54 Pfizer Laboratories 23 Pharmacia Laboratories, Inc. 65
Supply Corp.) 179 Beech-Nut Packing Co. 153 Bilhuber-Knoll Corp. 33 Birtcher Corp., The. 158-159	Pitman-Moore Co
Borcherdt Malt Extract Co	Rand Pharmaceutical Co., Inc
Brewer & Co., Inc	Robins, A. H., Co., Inc. between 64-65, 136-137, 205 Roerig, J. B., & Co71, 194-195
4th cover Clay-Adams Co., Inc	Royal Metal Mfg. Co. 171 Sanborn Co. 24 Sandoz Pharmaceuticals 202-203 Schenley Laboratories, Inc. 20-21
Crookes Laboratories, Inc	Schering Corp. 35, 52-53 Schmid, Julius, Inc. 227 Scholl Mfg. Co., Inc., The 246
Endo Products, Inc. 175 Flint, Eaton & Co. 22 Fuller Pharmaceutical Co. 55	Seeck & Kade, Inc. 234 Sharp & Dohme .62-63, 219 Sklar, J., Mfg. Co. .246 Smith-Dorsey .247
Geigy Pharmaceuticals 237 Genesy, W. A. & Co. 242 General Foods Corp. 40	Smith, Kline & French Laboratories 17, between 48-49, 252-253 Squibb, E. R., & Sons, Div. of
Hamilton Mfg. Co	Mathieson Chem. Corp. 5 Strasenburgh, R. J., Co. 39 Strauss Laboratories 250 Stuart Co., The between 160-161 Tampax, Inc. 251
Homemakers' Products Corp. 133 Horlicks Corp. 30 Irwin, Neisler & Co. 241	Upjohn Co., The
Ives-Cameron Co., Inc	U. S. Vitamin Corp198-199
Johnson & Johnson .46, 184-185 Kenwood Laboratories, Inc. .200-201 Kahlenberg Laboratories .242 Kinney & Co. .50-51 Kremers-Urban Co. .229 Lakeside Laboratories, Inc. .31	Varick Pharmacal Co., Inc
Lederle Laboratories Division	14, 128-129, 168-169
Lilly, Eli, & Co. 8, 28-29, 38, 68, 214, 223, 230, 248-249	Wyeth, Inc

NOW

the first intramuscular digitoxin

DIGITALINE NATIVELLE' INTRAMUSCULAR

for dependable digitalization and maintenance when the oral route is unavailable



DIGITALINE NATIVELLE INTRAMUSCULAR

is indicated for patients who are comatose, nauseated or uncooperative, or whose condition precludes the use of the oral route.

DIGITALINE NATIVELLE INTRAMUSCULAR

provides all the unexcelled virtues of its parent oral preparation.

Steady, predictable absorption.

Equal effectiveness, dose-for-dose with oral DIGITALINE NATIVELLE.

Easy switch-over to oral medication.

Clinical investigation has shown that DIGITALINE NATIVELLE INTRAMUSCULAR is "effective in initiation and maintenance of digitalization. A satisfactory therapeutic effect was obtained with minimal local and no undesirable systemic effects."*

DIGITALINE NATIVELLE INTRAMUSCULAR-1-cc. and 2-cc. ampules, boxes of 6 and 50. Each cc. provides 0.2 mg, of the original digitoxin-DIGITALINE NATIVELLE.

*Strauss, V.; Simon, D. L.; Iglauer, A., and McGuire, J.: Clinical Studies of Intramuscular Injection of Digitaxin (Digitaline Nativelle) in a New Solvent, Am. Heart J. 44:787, 1952.

Literature and samples available on request.

VARICK PHARMACAL COMPANY, INC.
(Division of E. Fougera & Co., Inc.)
75 Varick Street, New York 13, N. Y.

for the prisoner of iron-deficiency anemia ...

THERE'S one effective way to release her-a prescription for potent, iron-vitamin therapy such as IBEROL.

One IBEROL tablet t.i.d. provides a therapeutic amount of iron. plus B₁₂, folic acid and five other B complex factors. Also supplies standardized stomach-liver digest and ascorbic acid. See formula.

IBEROL tablets are compressed, triple coated—contain no trace of liver odor or taste. An outer sugar coating masks the iron, gives a pleasant odor and taste.

For prophylaxis in pregnancy, old age or convalescence, one or two tablets daily are usually enough. IBEROL may be used as a supplemental hematinic in pernicious anemia. In bottles of 100, 500 abbott and 1000.

THREE IBEROL TABLETS: the average daily therapeutic dose for adults, supply:

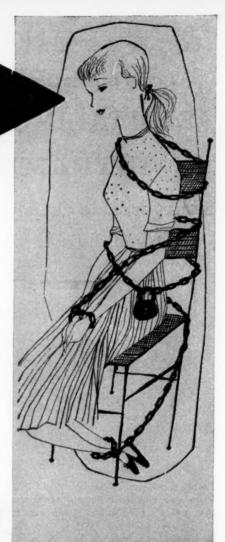
Ferrous Sulfate, U.S.P. (representing 210 mg, elemental iron, the active ingredient for the increase of hemoglobin in the treatment of iron-deficiency anemia)

PLUS THESE NUTRITIONAL CONSTITUENTS: ... 6 mg.

Thiamine Mononitrate. (6 times MDR*) Riboflavin (3 times MDR*). Nicotinamide (2 times RDA†) 30 mg. Ascorbic Acid (5 times MDR*) 150 mg. Pyridoxine Hydrochloride..... Pantothenic Acid..... 3 mg 6 mg Vitamin B₁₂.
Folic Acid... 30 mcg 1.5 Gm. Stomach-Liver Digest

*MDR - Minimum Daily Requirement †RDA - Recommended Daily Dietary Allowance





IBEROL*

(Iron, Bsz, Folic Acid, Stomach-Liver Digest, With Other Vitamins, Abbott)



"...completely amenable to cure"



Available in bottles of 30 and 100 capsules.

Wilbur, D. L.: Principles in the Use of Vitamins in Treatment: I.Vitamin Deficiency Diseases. Gastroenterology, 1:179, Feb., 1943. "Vitamin deficiency diseases . . . with the exception of a few extreme instances are completely amenable to cure."

When a vitamin deficiency state exists—as may be the case in old age, with restricted diets, during convalescence, certain chronic illnesses, pregnancy—intensive vitamin therapy may be effectively instituted with

PLURAXIN®

SPECIAL THERAPEUTIC FORMULA

High Potency Multiple Vitamin Capsules:

Vitamin A	25,000 uni
Vitamin D ₂ (from ergosterol)	. 1,000 uni
Vitamin B ₁ (thiamine) hydrochloride	. 15 mg.
Vitamin B2 (riboflavin)	. 10 mg.
Vitamin B6 (pyridoxine) hydrochloride	. 2 mg.
Vitamin B ₁₂ (cyanocobalamin)	. 5 mcgm.
Folic acid	. 1 mg.
Calcium pantothenate	. 10 mg.
Nicotinamide	. 150 mg.
Vitamin C (ascorbic acid)	. 150 mg.

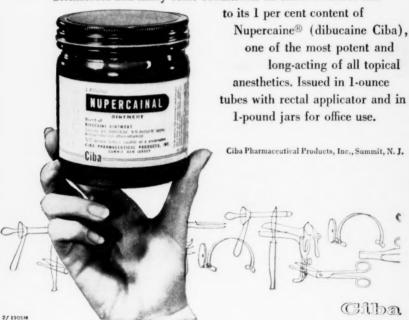
One or two capsules of PLURAXIN daily usually suffice



Long-lasting relief of surface pain and itching with Nupercainal

potent nonirritating nonnarcotic

The effective and prolonged surface anesthesia provided by Nupercainal Ointment (dibucaine ointment Ciba) brings long-lasting relief from pain and itching in sunburn, hemorrhoids, abrasions, dermatoses and many other conditions. Its effectiveness is due



MODERN MEDICINE 84 S. 10 St., Minneapolis 3, Minn.

FORM 3547 REQUESTED